THE VETERINARY RECORD

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Barium Chloride and its Therapeutic Allies.

On another page will be found a recommendation of barium chloride by a German veterinarian, whose experience corroborates that of many others regarding the value of the drug. Barium chloride occupies a curious and decidedly unsatisfactory position in veterinary practice. In the not uncommon cases in which it is indicated its value is undoubted, but there are two opinions upon its safety. In this country and in America at least, very many practitioners do not use it, from an idea of its danger which those who have used it most do not seem to share. The same remark would apply to Arecoline and Eserine, but perhaps to neither quite so forcibly as to barium chloride.

Of course our treatment of equine abdominal affections is greatly hampered by difficulties of diagnosis, and in all probability always will be. Still, there are many cases in which the indications for speedy and copious purgation are clear, and it cannot be said that the older methods of inducing it are satisfactory.

Neither an oleagenous purgative nor a physic ball is altogether reliable, and both require many hours to act, which is a most serious disadvantage in treating the intestinal impactions of the horse. Nevertheless, too many practitioners at the present day invariably give purgatives orally, objecting to the far speedier method of obtaining catharsis by hypodermic, intra-tracheal, or intra-venous injections. It is now more than twenty years since the action of eserine, given subcutaneously or intra-tracheally with or without the addition of pilocarpine, was demonstrated, but not a few veterinary surgeons still distrust it. Arecoline and barium chloride are more recent introductions, and are less generally used than eserine.

Of the three drugs, barium chloride has some special advantages—and disadvantages. Its advocates claim that its action is at least as prompt and much less distressing than that of eserine or arecoline, and it is certainly far cheaper than either of these. Its disadvantages are two. It is too irritant for hypodermic injection and—unless given by the mouth, when it is not so reliable in its effects—can only be introduced intra-venously. Then in addition to the possibility of rupture of the intestine, which is also said to attend the use of eserine and arecoline, it is quite certain that in some cases death from heart failure has occurred within a few minutes of the injection of barium chloride. It is possible that the first-named risk has been a great deal over-estimated, for if intestinal rupture has followed the use of these drugs, it is also not rare in cases where they are not used at all. The cardiac effect of barium chloride is a more unquestionable danger, yet some men having great experience of the drug use it less cautiously than its latest German advocate.

Muir, after extensive experiments upon barium chloride, concluded 30 grains intra-jugular to be a safe dose for a horse of average weight and fair condition. On one occasion, however, he gave this dose twice within 2¾ hours to a horse weighing 900lbs., and death from cardiac failure occurred a few minutes after the second dose. Winslow considers that 15 grains may be injected with absolute safety, and repeated an hour later if necessary.

On the whole, the weight of testimony seems to support the view that the dangers of barium chloride have been overrated. One danger, however, should be remembered--the sericus effect that would follow the introduction of the solution into the connective tissue of the jugular region. We know of no record of this; but it is obviously possible, especially when the patient is violent, and it may already have occurred with disastrous results which have been left unrecorded.

The dubious position which these drugs hold in veterinary public opinion is not to our credit as a profession. We know that cases of impaction are often lost through the tardiness of action of the old purgatives. There are at least some of us who have never given the new ones a fair trial.

EQUINE DENTITION AS EVIDENCE OF AGE.

In your issue of April 24th is an abstract from Ohm, who states that "up to four years old the age can be estimated by the teeth almost with certainty in equines." That rule does not hold good with Australian horses. During the last thirty years I have professionally examined several thousands of horses for dental irregularities, and find that even at two years old many expert horsemen are baffled in judging colts' or fillies' ages. Both in this and other districts I have met with several two-year-olds showing fully developed permanent incisors both in upper and lower jows. In one case a sixteen-year-old mare with an almost fully developed new top incisor replacing an old tooth. In many other cases dentition has been delayed one to two years among three to five year olds. Another case where a six-year-old mare had only four top incisors, and a seven-year-old gelding without tushes. Nutrition has much to do with those irregularities in young horses.

M. Bodey, R.V.S.

Ballarat, Victoria.

SOME CANINE NOTES.

HORACE L. ROBERTS, F.R.C.V.S., Ipswich.

Case I.—A brown Pomeranian dog, age two years, weight 14lbs., was brought to the surgery for advice respecting a growth, situate in the subcutaneous connective tissue and cutis, in the region of the croup.

The owner informed me that a local "dog doctor"—a blacksmith by trade—said it was a wart. On examination I found the growth to be spherical in shape, hairless and with a very short pedicle; but it was certainly not a papilloma.

The tumour was removed in the customary manner, antiseptic used for site of operation, hands, etc. perchloride of mercury — local anæsthetic employed, codrenine.

After removal, and on further macroscopic examination, the neoplasm appeared to me to be a melanoma, which opinion was subsequently confirmed by the Principal, R.V.C., Camden Town, who kindly made a microscopic examination of the tissue forwarded.

The surgical aspect of this little case is very simple, and not particularly interesting. On the other hand, from a pathological view, the case probably presents two features which may have been worth noting. In the first instance, I believe melanomata are not of frequent occurrence in the dog; and, secondly, the colour of the dog is brown. In this connection it may be remarked that "melanotic tumours are very rare in the domestic animals, other than grey horses; occasionally met with in the ox; there, the colour of the animal is nearly always brown." (Professor M'Fadyean's lectures, Session 1893-94.)

Possibly the special colour of this dog is merely a coincident—probably melanomata have been removed from dogs of other colours.

Case II.—Subject: Irish terrier dog, age eighteen months, condition hard, disposition quiet, habits obedient, the property of a cab-driver, was brought to me on 6th Jan. 1909, with a broken leg.

Diagnosis: Simple fracture of right tibia.

Fracture reduced; cotton wool, wood splints, plaster of Paris bandage and plain bandage applied. Splints and bandages removed after three weeks. Recovery uneventful.

The skiagraph, taken sixteen weeks after date of fracture, shows the "modelling" of bone to be nearly complete.

Case III.—Subject: Toy Manchester terrier bitch, age two years, condition good, disposition exicitable, habits disobedient, the property of a lady, was brought to me on 23rd February, 1909, with a broken leg.

Diagnosis: Fracture of right radius and ulna, and dislocation of the humero-radial articulation. The dislocation was reduced, the fracture was reduced, and cotton wool, splints and bandages applied.

I saw this patient at intervals between 24th Feb. and 9th March, on which date I found the leg had been fractured a second time.

As we find usual, I was not informed on 7th March that something was noticed to be amiss with the bandages, and that the bitch had been allowed to climb up and down the stairs, and furthermore that on that date (7th) she had fallen from a chair against an iron fender, which acrobatic performance, I was told afterwards, gave her much pain.

The leg was re-bandaged in splints as before; but, owing to the swelling of the parts—probably due to the formation of osteophytes — perfect reduction was not obtained.

The skiagraph, taken seven weeks and one day after the date of the second fracture, illustrates the condition of the bones at that time.

I also submit two photographs of the bitch, taken on 23rd June, 1909, exactly four months after date of first fracture. From the photos it will be seen there is no difference in the length of the fore limbs, and I may say the bitch does not walk or run lame. I hope, in the course of a few months, the resorption of the callus will be more or less complete.

The X rays are, undoubtedly, one of the greatest aids at our disposal to a correct diagnosis in canine and feline surgical practice. Nevertheless I do not think the picture on the screen, presented to a practitioner in a case of fracture of a limb, should unduly influence one's prognosis in an unfavourable direction.

THREE PECULIAR CASES OF SO-CALLED MILK FEVER.

Case I.—Ayrshire cow about nine years old.

History.—Twelve days calved, in good condition, heavy milker, had gone on well since calving. After being taken in for milking at night dairyman noticed her twisting her hind quarters round the stall and hanging on the chain, he took the chain off her neck and she dropped back on to the walk and was unable to rise, so they pulled her outside and sent for us.

Symptoms.—We found her lying on her side very excited, foaming at the mouth, champing her jaws, grinding her teeth, tympanitic, udder flabby, secretion of milk insignificant, temperature 100·6.

Diagnosis.—Milk fever.

Treatment.—Injected udder.

Result.—Got up and walked into her stall in about an hour.

Case II.—Ayrshire cow about eight years old.

History.—Ten weeks calved, in fair condition, heavy milker, found in field unable to get up; after some persuasion with an ash plant she was got on her legs, and with steadying managed to get into a loose box, where she attempted to stand on her head, finally fell, and lay so still that the owner concluded she was dead, and we were wired for as he had had a case of anthrax shortly before and thought there was a possibility of another.

Symptoms.—She was lying quietly, being well bolstered up with straw, breathing very slow, head turned round against ribs, udder empty or nearly

so although she had not been milked, unable to rise, temperature 101.

Diagnosis.—Milk fever, and treatment accordingly.

Result.—Got up in about forty-five minutes, walked out of box into her stall. Next morning coming back to her milk, and has gone on well.

Case III.—Shorthorn cow, seven years old.

History.—Five months calved, in calf again, very heavy milker, fat, out night and day at grass. The previous night being wet and stormy she was kept in byre; at the morning milking she scarcely had half her usual quantity, but that was thought to be caused by being in all night. Found in the afternoon lying in field flat out. With a good deal of trouble she was got up, and managed to stagger into the byre, where she immediately dropped; and we were asked to attend her.

Symptoms.—Lying nice and quiet, being well bedded and propped up, inclined to get on her side, consequently very tympanitic. While trying to turn her over she struggled to her feet, and showed what I consider characteristic symptoms of the disease, hind legs as straight as possible, back arched, all four feet gathered well under body, paddling continuously with hind legs. She did not stand many minutes, but went down with a crash as if poleaxed, lay over on her side, head and legs stretched out, breathing fast, moaning, skin, horns, ears, and legs cold; rectum and bladder very full, temperature 99·6.

Diagnosis.—Milk fever, and treatment accordingly,

Result.—Got up in about half an hour, came back to her milk in a few days.

Remarks.—These three cases have occurred in our practice since the beginning of May. All made good recoveries, and my only reason for recording them is the length of time after calving. We occasionally have cases before calving, and it is not unusual to inject a cow's vessel and remove the calf before leaving her.

P. McKinlay, M.R.C.V.S.

Stranraer.

ABSTRACTS FROM FOREIGN JOURNALS.

Barium Chloride in Colic.

Carl Berndt, of Chamnitz, having used barium chloride extensively, speaks in the highest terms of its efficacy in spasmodic colic and in constipation colic. He has obtained successful results by its use in cases where eserin, pilocarpine, arecolin, and mixtures of these have completely failed.

For the last three years he has used the drug intravenously in doses of one gramme (15 grains) dissolved in ʒiiss. of water, injecting this dose in two portions within a space of five minutes; and although he has practised this very extensively, he has had no untoward accidents from it. Very often, in cases of severe impaction, he has had to repeat the injection the next day in order to obtain copious defæcation. But even in cases where immediate defæcation is not obtained, the effects of the drug are evidenced by lifting of the tail and straining within a few minutes after the injection. When this has not happened, Berndt has been able to diagnose paralysis of the intestine during life, and in 90 per cent. of these cases has found post-mortem that the paralysis was due to thrombosis of the superior mesenteric artery caused by the *strongylus armatus*.

Berndt does not consider that the use of barium chloride necessitates extreme caution in dosage. He cites the following case as the one in which he employed the drug most drastically.

The subject was a five-year-old gelding of Danish breed, suffering from severe constipation-colic. The horse was very uneasy, and no intestinal sounds were perceptible upon auscultation. The appetite was totally suppressed. The temperature was 100 F. Exploration of the rectum showed that the intestines lying beneath it were tightly crammed with hard masses of dung.

The horse received an alœtic ball, one gramme of barium chloride intravenously, and a large dose (one gramme) of hydrochlorate of morphia subcutaneously. The intravenous injection was followed by the passage of six or seven hard balls of dung. The condition of the patient did not alter in the course of the day; no further defæcation took place, but the uneasiness abated somewhat under the heavy dose of morphia.

The next morning Berndt was informed that the horse had again been very uneasy during the night. The general condition was the same as the previous day, the temperature being 100·7. After ascertaining that the pulse and heart were normal, Berndt gave a second intravenous injection of one gramme of barium chloride. This was speedily followed by the evacuation of 45 small, dark, hard balls of dung.

On this day also no improvement set in. In the evening the temperature had risen to 102; the animal was standing with his limbs spread wide, the respiration was accelerated; the pulse was small and 50 per minute; the heart sounds were clamorous. Berndt ordered half a litre (=7-8ths of a pint) of cognac to be given, and told the owner to "clyster perseveringly"—this last measure being taken to satisfy the owner, although Berndt himself expected no benefit from it.

At six o'clock the next morning all the symptoms had become aggravated. The horse was breathing with dilated nostrils; the conjunctiva was blood-red; the pulse scarcely perceptible, and the heart sounds clamorous. Exploration of the rectum revealed that the intestines beneath it were still filled with masses of dung, which, however, seemed to have become somewhat softer than before. Peristalsis was not present.

Having obtained the owner's consent to a larger and more dangerous dose, Berndt injected 2 grammes (nearly 31 grains) of barium chloride in two portions within ten minutes. The result was that within half an hour defæcation took place from ten to thirteen times. The material evacuated ranged from hard dung balls to semi-fluid fæces, was of

great quantity, and its evacuation was attended by very loud peristaltic sounds.

The horse recovered. Berndt adds that he has often saved animals which had been given up by the use of barium chloride.—*Berliner Tierärztliche Wochenschrift.*

[Fifteen grains of morphia scarcely seems a commendable accompaniment to barium chloride. The morphia may have accounted for the obstinate nature of the case.—TRANS.]

ANTHRAX IN THE PIG.

On the 10th of June, a noteworthy case of anthrax was discovered at the Hamburg abattoir in a pig apparently healthy before slaughter. When the carcase was examined, a jelly-like condition of the mesenteric fat was found, and a considerable enlargement of all the mesenteric glands, which were marrowy, moderately dry, and dark red in colour. The intestine, liver and spleen were without any very striking lesions.

Microscopically, numerous typical anthrax bacilli were found in the mesenteric glands, but not in the liver, spleen and blood. The bacilli were easily cultivated.

The post-mortem findings indicate a recent intestinal infection.—*Berliner Tierärztliche Wochenschrift.*

[The lesions are those which might be expected in a recent intestinal infection by anthrax bacilli, but opportunities of observing the morbid changes at this early period are rare.—TRANS.]

CANINE PIROPLASMOSIS.

Eggebrecht (*Zeitschr. für Infectionskr. parasit. Krankh. und Hygiene der Haustiere*) records an observation upon a case of piroplasmosis in a sheep dog of the German breed. The animal was not quite two and a half years old, and had lived continuously at Tsingtan.

The history given by the owner was that the dog had been ill for four or five weeks. The earlier symptoms were high fever (with subsequent fall of the temperature to beneath the normal) dullness, and loss of appetite. The pulse and respirations were accelerated, and the urine was coffee-brown in colour. Improvement set in and lasted for about a fortnight, to be followed by a deterioration which, at the time of Eggebrecht's examination, had in turn given place to another improvement, which was daily becoming more marked.

Microscopic examination of the blood revealed the presence, in numerous blood corpuscles, of the partially annular, partially elongated oval parasites of canine piro-plasmosis.

Blood from the patient was injected subcutaneously into two dogs of Chinese extraction, in order to confirm the diagnosis and test the infectivity of the blood.

In one case a positive result followed.—*Berliner Tier. Woch.*

INFECTIOUS ABORTION OF CATTLE.

Nuesch, of Flawyl, states (*Schweizer Archiv. fur Tierheilkunde*) that he has quickly checked infectious abortion of cattle upon three farms by the internal administration of carbolic acid, and therefore recommends the treatment for further trial. He gives the drug by the mouth, each cow receiving 1 to 1½ litres (= 1¾ to 2¾ pints) of a 1 per cent. solution of carbolic acid in water daily in a single dose. Both pregnant cows and those which have already aborted are thus treated, and the daily medication is continued for from five to ten days. Nuesch did not observe the slightest unfavourable effect from the drug in the above doses and dilution. —*Berliner Tierarztliche Wochenschrift.*

W. R. C.

SECONDARY CYSTS OF TÆNIA ECCHINOCOCCUS IN A PIG.

According to *La Clin. Vet. Sez. Scient.*, March 2, 1909, the formation of secondary cysts of Tænia ecchinococcus often occur, especially in the pelvis. This was found to be the case in a two-year-old gelt pig. The primary infection was seated in the liver, and the secondary cysts were in the muscle tissue, attached to the internal surface of the pelvis. Three had a diameter of 25—30 millimetres, and there were many smaller ones.

F. E. P.

HEALTH CONGRESS, LEEDS, 1909, (JULY 17TH TO 24TH).

Promoted by the City and University of Leeds, with the co-operation of the Royal Sanitary Institute and of the Royal Institute of Public Health. President: Colonel T. W. HARDING, J.P., D.L.

We are requested by Mr. H. G. Bowes, F.R.C.V.S., of Leeds, President of the Conference of Veterinary Surgeons in connection with the Congress to ask you to call the attention of veterinarians to the Congress.

On Tuesday, 20th July, the Preventive Medicine Section hold a general discussion on Tuberculosis, whilst on Wednesday, the 21st, a joint discussion on the protection of the food supply has been arranged. At both of these meetings it is very desirable that veterinarians should attend in strong force, as it is to be feared we shall have plenty to do to defend our professional status at these meetings.

The Veterinary Conference will be held on Thursday, July 22nd, and at it papers will be read by Mr. Holburn, late Chief Veterinary Inspector for the Manchester Corporation, on the "Eradication of Bovine Tuberculosis"; Mr. Parker, Veterinary Inspector for Newcastle, on "Anthrax and Glanders"; Mr. Levie, F.R.C.V.S., of Nottingham, on "Milk—Some Interesting Points to Veterinary Surgeons," so that it will be seen that the Conference will be interesting to all veterinary surgeons. The new Tuberculosis Order will be introduced for discussion, and it is very desirable that veterinary surgeons should come to some understanding regarding two or three points in the Order. We may point out that all members of the profession are entitled to attend the Conference without becoming members of the Congress.

We should like to ask you to urge all members of the profession who possibly can to attend all the above meetings, as this being the only Health Congress held in this country this year, we are, so to speak, "on our mettle" as a profession, and are deprived this year of any excuse which may have previously existed—that some of our prominent men were at the other Congress.

We know, sir, the deep interest you take in furthering the interests of our profession, and we hope you will understand that it is solely for the same reason that we wish the veterinary attendance at the Congress to be at a much higher level than has previously been the case.

We notice in the regulations governing the Congress that "No resolution to be proposed at any of the Sections or Conferences unless sent to the Secretary of the Section or Conference in time for approval and insertion in the programme for the day on which it is to be proposed." This regulation has previously been the cause of dissatisfaction at the Veterinary Conferences. Would you kindly draw the attention of veterinarians to it so that they may forward in proper time any resolution which they would like to be put to the meeting.

It seems to us also that by attending the discussions on the Tuesday and Wednesday, veterinarians may thus gather information which would point out the necessity for a resolution, and if notice was given to the Secretaries on the Wednesday we see no reason why it should not be acceptable and in proper order for our Conference on the Thursday, which constitutes in itself another reason for veterinarians attending the joint discussions.

—Yours faithfully,

J. Clarkson, M.R.C.V.S.
J. A. Dixon, M.R.C.V.S. } *Hon. Secs.*

41, Park Square, Leeds.

TRANSVAAL VETERINARY MEDICAL ASSOCIATION.

The twenty-fourth quarterly meeting was held at Pretoria on the 27th March at the Resident Magistrate's Court Room. Present: Mr. J. K. Pilkington (Vice-President) in the Chair, Messrs. Tate, Christy, Dr. Theiler, C.M.G., Bush, Mitchell, and Chalmers, hon. sec.

The Chairman suggested that if there were no objections to the last minutes of meeting, they be passed for signature.—Agreed to.

Mr. W. H. Power, M.R.C.V.S., Principal Veterinary Surgeon, Maritzburg, Natal, who had been nominated at last meeting, was proposed for election by the Hon. Sec., and seconded by Mr. Christy.—Carried.

Mr. Christy proposed the suspension of the Standing Rules of the Association in order to elect Mr. D. T. Mitchell, Government Veterinary Surgeon, Department of Agriculture, Pretoria, a member of the Association so that the necessary quorum required under Rule XIX be formed to enable the meeting to proceed.

Mr. Bush seconded.—Carried.

The Hon. Sec. intimated the following gentlemen requested him to apologise for their absence: Messrs. E. A. Hollingham, H. Keeling Roberts, J. Walker, J. R. R. Hamilton, J. I. Edgar, J. Donaldson, S. I. Johnstone, A. McNae, F. J. Dunning, C. E. Gray, and T. H. Dale.

The Hon. Sec. informed the meeting that Mr. C. T. Clemow, Kroonstad, O.R.C., although repeatedly written to, had decided to resign membership.

Mr. Bush proposed the resignation be accepted with regret. Mr. Tate seconded.—Carried.

Correspondence.

The Hon. Sec. informed the members of the various matters dealt with since the last meeting and correspondence relating thereto, and also read the circular letter sent to all members in connection with the International Veterinary Congress to be held at the Hague.

Dr. Theiler stated that in connection with the last mentioned item he had received 48 subscriptions from South Africa. Every Government Veterinary Surgeon in the different Services had subscribed, and he would be glad if the private practitioners in the Transvaal would become members. One private practitioner in Cape Colony had subscribed.

The Chairman mentioned the previous discussion on this matter and enquired as to whether on account of the donation voted by the Association, all members of the Transvaal V.M.A. would receive copies of the proceedings.

The Hon. Sec. explained that the Association would receive only one copy which would be sent to the Hon. Secretary of the Transvaal V.M.A.

Dr. Theiler pointed out that by joining as a member of the Congress the list, when published, would show the world that the veterinary profession in South Africa was not wanting in representation. The discussions would embrace the interests of the profession as a whole and include many scientific problems, explaining their latest developments. He felt he should induce members to subscribe, having been asked to do so from the Hague. The expenses of the Congress being heavy, all subscribers would assist in defraying these.

The Chairman thanked Dr. Theiler for his explanation and requested his name be added to the list.

Mr. Christy suggested that Mr. Pilkington endeavour to procure other private practitioners as subscribers, and he (Mr. Christy) undertook to add another name to the list.

Veterinary Surgeons' Ordinance.

Dr. Theiler said General Smuts had not yet been interviewed owing to the latter's frequent absence.

The Hon. Sec. read a letter from the Secretary of the Veterinary Society, Cape Town, in connection with the Transvaal Ordinance, enquiring what progress was being made in this matter.

Mr. Bush proposed the Secretary should send a copy of the Transvaal Ordinance explaining what had been done, and stating that this matter remains in the hands of Mr. Gray and Dr. Theiler who are to approach the Government.

A Federated Association.

Dr. Theiler explained the possibility of a Federated Association. He reminded those present that already a Pan-African Veterinary Congress was formed, but up to the present this had only consisted of Government representatives from the various Colonies of this Continent. However, there was nothing to debar representation of societies and private men at this Congress. It was only necessary for the names to be suggested and arranged for by those responsible for the convening of the next Pan-African Congress. Such a meeting as that would practically inaugurate a Federated Association. Papers could be read and published in the form of a general South African affair.

The Chairman thought a difficulty might arise in making certain of the delegate's attendance.

Dr. Theiler said that the expenses of the delegates should be defrayed by those whom they represented.

The Chairman enquired whether members of the veterinary profession other than delegates would be permitted to attend the federated meetings.

Dr. Theiler replied that this could be done at that member's own expense—the delegates only being there in an official capacity.

The Chairman thought it preferable that delegates only should be admitted.

Mr. Christy in agreeing with the last speaker, stated it would be necessary in order to secure equal representation from other colonies, that those other colonies form their own societies—each society having its own delegate. He suggested the Hon. Secretary communicate with the principal veterinary surgeons of the surrounding colonies in accordance with this idea.

Dr. Theiler raised the question of the publication of a veterinary magazine for this country. This periodical to be successful must have Government, societies, and

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private individuals' support. The Pan-African Congress thinks this idea advisable, but money is needful for its fruition. He therefore suggested that the various societies, etc., should bear proportionate expenses towards publication, and that an endeavour might be made to amalgamate with India in producing a journal dealing with tropical diseases. He further suggested the inclusion of Congo, German East and West Africa, Portuguese East Africa and Egypt.

Mr. CHRISTY proposed that the Hon. Secretary be instructed to write to the P.V.S.'s of all British South African colonies, Portuguese East Africa, Madagascar, Congo, German West Africa, British East Africa, German East Africa, Egypt, Erithraea, Tunis, and Abyssinia. They should be informed that a suggestion has been made regarding the formation of a Federated African Veterinary Association, and should be asked to give their support to the proposition. The Secretary when writing should state that the object is to consolidate veterinary interests; to aid in the publication of a journal devoted to tropical veterinary science; to bring veterinary surgeons all over Africa in touch with one another, and to be in a stronger position when approaching various Governments with the view to their introducing and extending veterinary services, and to support veterinary research and education.

Dr. THEILER seconded. [Carried].

It was also agreed unanimously to introduce this matter again at the next meeting.

REGISTRATION OF FARRIERS.

The HON. SEC. read a letter from the Town Clerk, Johannesburg, enclosing a petition asking the municipality to provide for the Registration of farriers.

Mr. CHRISTY proposed that the Hon. Sec. be instructed to reply stating the T.V.M.A. is in full sympathy with the petition, and explaining that the Society considers farriers should be registered after due examination by a properly qualified Board of Examiners, on which the veterinary profession should be represented. It is considered, however, that the question whether coloured people should or should not be excluded from registration does not come within the scope of this Society.

The CHAIRMAN seconded. [Carried].

SECRETARY'S EXPENSES.

The HON. SEC. submitted his statement for postage etc. amounting to 19s. 1d.

Mr. TATE proposed it be passed for payment. Mr. Bush seconded. [Carried.]

VETERINARY SERVICES IN CONNECTION WITH WITWATERSRAND AGRICULTURAL SOCIETY'S SHOW.

Mr. CHRISTY proposed the matter be deferred to the next general meeting, in Johannesburg, for discussion and action. The HON. SEC. seconded. [Carried.]

The HON. SEC. suggested that as Mr. Hollingham was not present the discussion on his paper be postponed till the June meeting. Mr. Christy seconded. [Carried.]

EXHIBITION OF MICROSCOPICAL AND PATHOLOGICAL SPECIMENS. None—as usual.

The HON. SEC. proposed a vote of thanks to the Chair. Mr. Tate seconded. [Carried.]

Mr. CHRISTY proposed a vote of thanks to the Resident Magistrate for the use of the Court Room. The Chairman seconded. [Carried.]

The VICE-PRESIDENT declared the meeting closed.

The sixth annual and twenty-fifth quarterly meeting will be held at the Goldfields Hotel, Johannesburg, on Saturday, the 26th June, at 10.30 a.m. prompt. Agenda.—Election of Officers: Retiring President's Address: General Business: Annual Statement *vide* Rule 30, Section (*d*): Continuation of discussion *re* Federated Veterinary Medical Association for South Africa: Correspondence *re* Registration of Farriers: Discussion on Paper by Mr. E. A. Hollingham, M.R.C.V.S.: Exhibition of Microscopical and Pathological Specimens.

JAMES CHALMERS, *Hon. Sec.*

SCOTTISH METROPOLITAN VETERINARY MEDICAL SOCIETY.

The quarterly meeting was held on Wednesday, April 28th, in the Royal Dick Veterinary College, Edinburgh. The President Dr. O. Charnock Bradley occupied the chair and the following members were present—Messrs. Hutton, Kelso, Macfarlane, Doune, T. D. Connochie, Galashiels; R. H. Connochie, St. Boswells; J. Storie, East Linton; P. Wilson, Lanark; J. Henderson, G. A. Thompson, D. H. Wood, R. Rutherford, A. Baird, A. Gofton, and Principal Dewar, Edinburgh. A number of students were also present as visitors.

The minutes of last meeting having been read and approved, the Secretary intimated the receipt of letters of apology from Messrs. Peddie, Jas. Macfarlane, Inglis, and Prof. J. R. McCall.

WRAGG MEMORIAL FUND.

A letter was read from Mr. Jas. F. Simpson asking for a contribution to this fund. After some remarks by members it was decided that the Secretary be instructed simply to acknowledge the receipt of the letter.

PUBLIC HEALTH CONGRESS.

A letter was read with reference to the joint congress of the Royal Sanitary Institute and the Royal Institute of Public Health to be held at Leeds from 17th to 24th July. The Secretary mentioned that the Society of Veterinary Officers of Health was to meet in Leeds at the same time as the Congress, and he suggested that if any of their members were going to that meeting they might represent the Society at the Congress.

On the motion of Principal Dewar it was left to the President and Secretary to arrange for a delegate to be sent.

AMALGAMATION OF VETERINARY SOCIETIES.

The SECRETARY intimated that he had received, in reply to the circular he sent out with reference to the proposed amalgamation of veterinary societies, letters from the Central, Eastern Counties, North of Scotland, North of England, and Southern Counties Veterinary Societies expressing approval of the general principle of amalgamation, and one from the Western Counties asking for details of a scheme. Several other Societies had discussed the matter and were favourable to the general principle, but he had not yet received any official communication from them.

The CHAIRMAN said it appeared to him that this Society having taken the first step must take the second, and that was to get together a number of representatives of various Societies in order that a scheme might be formulated and submitted to the several Societies. That was the logical second step in the process. After that they as a Society would simply receive schemes and consider them. He moved:—"That, in view of the number of Societies expressing favour of the principle of amalgamation, the Secretary be instructed to take steps to promote a meeting of representatives from the several societies with the object of drafting a scheme for submission to the various Societies, the meeting to be held coincidently with the meeting of the National Association at Harrogate."

The SECRETARY seconded the motion.

Mr. RIDDOCH asked if it was contemplated that they

should include the National Association in the amalgamation scheme.

The CHAIRMAN said it was, but there was really no scheme before them—just the general principle. He hoped the National Association might be reconstituted on a broader basis, and therefore with more power for good. The motion was then adopted.

On the motion of the Secretary, the President (Dr. Bradley) was appointed one representative, and on the motion of Mr. Baird the Secretary was appointed a second.

NEW MEMBERS.

Messrs. W. A. DOUGHTY, Ayton, and JAS. F. PLAYER, Edinburgh, were elected members of the Society.

SOME ASPECTS OF VETERINARY PRACTICE.

By G. ELPHICK, M.R.C.V.S.

When my friend Prof. Gofton wrote asking me to read a paper before you I made up my mind at first to respectfully decline. Upon second thoughts, and remembering the many kindnesses I had received from members of this Society, I thought I ought to try and do something to show my appreciation of your kindness. I had considerable difficulty in selecting a subject which you would all appreciate and which we could all discuss. I made certain suggestions to Prof. Gofton, and after a little correspondence it was decided that I should try and deal with "Some Aspects of Veterinary Practice."

It is forty years since I made up my mind to become a veterinary surgeon, and it is thirty eight years last week since I had the honour of graduating at this College. I may say that my College career was a very happy one, but unfortunately we fell on evil times. The professors were divided, and so were the students. Death removed some of the professors from amongst us, others were suspended, and it necessarily followed that if we wished to obtain our diplomas we had to work very hard. I do not think it did us any harm, I think it did us an immense amount of good. It taught us to work, and it taught us to think, and when I look back and follow those who graduated at that time, I think, on the whole, we made successful practitioners. Since that time the profession has made enormous advances. I have no doubt that the graduates as they are turned out now are much better fitted for their profession than those that were turned out in my days, it is only natural that they should be. There is one thing that I think they are not so well up in as the old practitioners, and that is sound practical knowledge—a thing which is only gained by time and experience.

When I left College I did not at once start for myself. I was offered a good assistantship with Mr. Clement Stephenson, and to him I think I owe largely the position I now hold in the profession. There is no doubt that during the nine-and-a-half years that I acted as his assistant I picked up a vast amount of practical knowledge that it would be impossible for me to pick up in any other way, and I urge all young men who are about to join the profession to be in no hurry to start for themselves. They had far better go to a good sound practitioner—if they only get board and lodging for a few years, and gain that confidence which is so essential for after success in life.

Since I joined the profession it is gratifying to note the great improvement in stable management, the feeding of horses. The abolition of cooked food and the striking of a balance between labour and the manger has very largely diminished the number of cases of colic, lymphangitis, and other diseases due to dietetic causes, greatly to the advantage of the horse owner by improving the horse's health and prolonging his working life—also a saving financially in the cost of keep.

The old-fashioned system of giving physic at certain times of the year, especially with new horses or horses newly taken up from grass, is now almost a thing of the past. A good plan is to prepare them for physic and forget to give it to them. A cold bran mash for three or four days will give a much better result without the risk of any ill effects. I do not say that a dose of physic is not at times beneficial and does good, still the animals should be well prepared by giving cold bran mashes prior to administration. I have often seen bad results by not doing so. I well remember giving a horse suffering from lymphangitis a dose of physic, followed by the usual application of hot water, of course the physic did not act, the horse being full of hard corn. The leg swelled to an enormous extent and the horse died. This was my first and last death from lymphangitis. This death made me think; and I asked myself, was it correct treatment to give a dose of physic immediately and to apply hot fomentations. I came to the conclusion not to give physic immediately, and to abolish hot fomentations. The result has been most satisfactory, and I seldom get a thick leg or only slightly thickened. The treatment adopted is to stop all food, to give diuretics and alteratives, gentle and frequent exercise, and hand-rubbing the leg I have found the use of marshmallow ointment very useful when rubbing the leg. As a rule the patient is fit for light work in a few days. If not I find a dose of physic does good.

The stable management of sick horses I think is of vital importance. If a sick horse is not properly housed and great attention given to nursing, the patient has but a poor chance of making a good recovery. I consider it the first duty of every veterinary surgeon to isolate his patient, if possible in a light, airy loose box, with plenty of room and well-drained. I find loose boxes with lofts above most suitable for sick horses, especially in chest affections as you do not get such extreme variations of temperature. Equalised temperature I consider is of the geatest importance in all chest affections and influenza. Where the loose boxes or stables are open to the roof you frequently have a difference of temperature varying from 10 to 25 degrees, and often more. This cannot be good for any horse either in health or sickness. I have on several occasions been called in to see breeding stock that have been doing badly and have generally found the cause to be want of a loft or air space. I geuerally recommend a few battens to be placed across the box or stable on a level with the eaves, and then place a layer of straw on top six or eight inches thick. I have found this to give most beneficial results and the stock to improve daily. Drainage and ventilation are also of great importance. I have great faith in surface drainage with the trap outside the stable. The ventilation should be good, easily controlled, and as high up as possible. The old fashioned bolt holes are of no use. They may establish a draught, but are not ventilations and frequently do more harm than good. When possible the sick box should face the south. In all cases the patient should be well clothed with light but warm clothing, and great care should be taken that the extremities are kept warm and comfortable with bandages or other suitable substitutes. It should always be a standing order that the clothing should be taken off, shaken and put on again immediately two or three times daily, and the bandages removed and the legs well hand-rubbed at least four or five times a day. When first taken ill I give nothing to eat for the first forty-eight hours they never die of hunger, and I often find it does them a great deal of good to go without food. When you do feed them give very little at a time, and if they eat it give a little more in the course of two or three hours. If they don't eat what you give them remove everything and leave them for some time with a clean rack and manger. Care should also be taken to keep the box sweet and clean by removing all wet and dirty bedding. There should be a liberal supply of good clean bedding

well placed round the sides of the box, it is also a good plan to remove the shoes as it allows of more freedom. These details may seem trifling in themselves, but as a whole I consider them of vital importance, and considerable aids in the successful treatment of the patient. I make it a strong point to give these instructions on every occasion and seeing that they are, as far as is practicable, carried out. In all outbreaks of disease it should be the first duty of the veterinary surgeon to turn his attention to the healthy as well as the sick. His first duty after isolating the sick should be to take every precaution against the spread of disease. A thorough cleansing and disinfection should be taken in hand at once; all stable utensils must be kept by themselves, and where water troughs are used they should be closed and, if possible, the horses watered out of separate pails. I am confident that our clients appreciate this attention and trouble, and at the same time we bring credit to ourselves.

In the administration of medicines our first object should be not to annoy or trouble the patient more than possible, to fight with him does more harm than all the good the medicine can do. It is a great advantage to get the patient to take the medicine in the drinking water: sometimes this is most difficult to accomplish, still with a little gentle perseverance and coaxing it is wonderful what a horse will take.

As to treatment of sick horses, no golden rule can be laid down. As a rule we have to treat symptoms. Knowing the fatal terminations, our one object should be to guard against them, and assist the patient to overcome the disease by careful nursing and common-sense treatment. I do not believe in trying to work miracles. Remember there is always a cause and effect, and until the disease has run its course we seldom get an improvement in the symptoms. It frequently happens that patients remain stationary for several days—neither better nor worse. In these cases I find patience a great virtue, and if the horse is holding his own, to let well alone.

Lame horses are frequently a source of a great deal of worry, trouble, and anxiety. Owners seems to think that a veterinary surgeon should be able to render a horse fit for work almost immediately. As a rule the majority of lame horses are lame low down about the foot, especially in the fore extremities; and in the hind legs the hocks are most frequently the seat of trouble. At times the seat of lameness is very difficult to localise, especially where there is nothing to see to account for lameness. In these cases we have to depend largely on the gait and the way the limb is used. As an example take shoulder lamess; the animal is unable to raise or extend the limb; if about the foot the leg is flexed and extended, and it is not until the foot is on the ground, or about to be removed from the ground, that lameness is visible. In splint lameness, although there is frequently nothing to see, we often get great lameness. The animal walks nearly or quite sound, and trots very lame. In lameness of this kind without anything to see, you very seldom get wrong by giving your opinion that it is due to splints, especially if it is a young horse. Occasionally we meet with rather an obscure lameness due to a bony enlargement or splint formation at the head of the pastern bone (os suffraginis). This lameness is characterised by a peculiar jerk or click in the action when the foot is about to be removed from the ground. Upon careful manipulation you generally find a bony enlargment under the extensor pedis tendon as it passes over the front of the fetlock joint, and frequently it is very sore to the touch and sometimes troublesome to cure. At times we meet with cases of lameness where there is nothing to see or feel that are exceedingly troublesome, do what we will in the way of local treatment they neither get better nor worse. In cases of this kind I find it a good plan to give them exercise or put them to work and make them either better or worse. Frequently they become sound and keep sound. On the other hand they may develop something definite which we are able to treat. It sometimes happens that they neither get better nor worse. The owner becomes dissatisfied, and if you have been treating the animal for foot lameness, the owner, his groom, and friends then make up their minds that the horse is lame in his shoulder, or some other place far removed from the foot. In cases of this kind I consider it good practice to inject cocaine over the plantar nerve immediately above the fetlock joint. Inject five or six grains on each side of the leg, allow the horse to stand for half to three-quarters of an hour, and then see him out, but before trotting the horse should be allowed to walk about for a few minutes to get accustomed to the numbness caused by the cocaine. If the lameness has been due to some disease in the foot the horse frequently goes sound or nearly so, and keeps sound for several hours. In one particular case, a big heavy cart horse became very lame in the near hind. We treated him for foot lameness for some considerable time without the slightest improvement. The owner began to despair for the horse's recovery and also to doubt as to the lameness being in the foot. To satisfy the owner as to the seat of lameness, and with his consent, we injected nine grains of cocaine into each side of the leg. To the owner's snrprise the horse came out sound, and to our still greater surprise he remained sound. After several weeks the owner became afraid that that the horse would fall lame again, and being a valuable horse he sold him, and unfortunately we lost sight of him. It would have been highly interesting to have been able to have examined the foot after death to determine the cause of lameness, and, if possible, why he should have kept sound after injecting cocaine.

In my opinion shoeing is a very frequent cause of lameness, and in a great many cases of incurable lameness, I am afraid we do not give sufficient attention to shoeing. I know that many members of the profession consider it beneath them to take an interest in shoeing. Those who do, and who have a good knowledge of shoeing in health and disease, have a big pull when called in to treat lame horses. It often happens that by a little mechanical contrivance in the alteration of the shoe, or in the way the foot is shod, the horse goes sound or becomes workably sound. Bad shoeing and the mutilation of the foot renders many a good horse valueless, cutting away the frog, removing frog pressure, cutting at the bars, and shortening the toes are the main causes of chronic disease of the foot. The horse's foot being exceedingly vascular and its blood supply great, it naturally follows that if the foot is mutilated, as described, the blood supply becomes impeded and consequently chronic disease and atrophy is set up. I ask is it not time that all horseshoers should be compelled to undergo a course of instruction in the anatomy and physiology of the foot, the principles and art of shoeing, and submit themselves to a thoroughly practical examination.

The examination of horses as to soundness is probably one of the most important and lucrative branches of the profession. At the same time it involves great responsibilities. It is absolutely necessary that the veterinarian should possess all his faculties and be a good horseman. It requires time and experience to become an expert, and to be able to give an opinion as to the probabilities of any defect or unsoundness being likely to interfere with the animal's usefulness. The word "sound" I take to mean that the horse shall be free from disease, the effects of disease or anything that is likely to interfere with his usefulness. I therefore take it that in sending a report or certificate we should be careful to note all defects and give our opinion on them. If a horse has splints, odd feet, coarse or curby

hocks, we should be careful to mention them and to give our opinion as to their likelihood or interfering with the horse's usefulness. If the purchaser then makes up his mind to take the horse he does so with his eyes open.

In the examination of horses it is very necessary to adopt a system or method of doing so, and by so doing you are not likely to miss anything. I always make a practice of seeing the horse in the stable, turn him from side to side to see if there is any stringhalt or shivering, then see him to the door and as he comes out examine his eyes. When outside stand him in a position in which you can walk round him and notice any defects. Start at the head on the near side and finish off at the off hind leg, then see him trot on, and test him for his wind. In the course of examination you may find splints, ringbones, sidebones, odd feet corns, thoroughpins, bog spavins, windgalls, swelled joints, grunting, roaring and whistling. In giving an opinion as to splints much depends on their situation. If under the knees (knee spavins) or peg splints, or a splint that a horse is in the habit of hitting, I think you would be justified in recommending your client not to take him. Ringbones on the fore extremities are to be avoided, and much depends upon the situation in the hind legs. Sidebones are fatal, especially for town work. Odd feet—much depends upon their formation, the age and breeding of the animal. It is quite common amongst race horses to find odd feet, and they seldom interfere with their usefulness. With feet like these I take the feet singly, and if they are normal I generally pass them. Corns are to be avoided, but if they are small and the feet good there is little risk in taking a horse with this defect. At the same time it is very necessary to point out that the horse should be carefully shod. Spavins are things upon which we all differ. At times it was most difficult to determine between a spavin and a coarse hock. Spavins are a serious unsoundness, and should be avoided. Coarse hocks—if situated well back and the horse uses his hocks well and has been tested with work, I consider there is little risk in a purchaser taking him. At the same time it is wise policy to obtain a special warranty for a certain time, if the vendor will give it. Thoroughpins, bog spavins, and windgalls are to be avoided, as they do not improve with keeping. It oftens happens that at certain times of the year we find horses with swelled or filled joints. This is frequently the case at the back end of the year, when horses have been turned out or fed on grass. As a rule this disappears as the horse gets into condition, and I consider there is little risk in advising a client to take the horse.

With regard to wind there is often a difference of opinion, and at times it is most difficult to detect any abnormal noise. Any unusual noise which the horse makes when being tested should always be looked upon with suspicion. I consider there cannot be two opinions about a roarer. Whistling at times is difficult to detect. You may have a confirmed whistler, a slight whistler, and a horse that only whistles occasionally, and then only when he is galloped to the right or left. I once came across a case that was only detected when galloping at top speed and with a slack rein. We also meet with cases that make a peculiar abnormal noise, neither a roar nor a whistle, and it does not appear to affect them. In these cases, if the horse is a good age and not high priced and a good performer, it is often worth running the risk. Many of us differ in our opinions about grunters. Although grunting may not be an unsoundness in itself, I should be exceedingly cautious about passing a grunter sound. I consider grunting a grave symptom of something else, and if they do not make a noise, nine out of every ten take the first opportunity of doing so. Dealers who have had considerable experience with grunters say they generally become whistlers or roarers.

All horses suffering from stringhalt or shivering should be rejected. At times these affections are most difficult to detect, and only after the horse has stood quietly in the stable for a time.

It is said that dirt hides a multitude of sins. Therefore it behoves us to be exceedingly careful to have all dirt removed from the feet and legs before examination.

Discussion.

Mr. Storie said with reference to Mr. Elphick's remark about veterinary surgeons of forty years ago, he was not sure if as good men were being turned out now as then. So far as a pupilage was concerned, he thought that if veterinary students had to serve an apprenticeship they would become much better veterinary surgeons. They were all students, however long they had been at the profession, but at a certain time of life the impressions they received were more valuable, and it would be a good thing if young men, before they went to College or between examinations, had to serve an apprenticeship. He thought there was too much cramming now-a-days. With regard to two subjects—botany and chemistry—a great deal was taught which was of no benefit to students, and which after student days had to be forgotten. Reference had been made to lameness being caused by shoeing, and something had been said about shortening the toes. In his district the great mischief was that they could not get the blacksmiths to shorten the toes. A great deal more damage was done by the toes being left too long than from their being too much shortened. The great point with the smiths now was to thin out the heels and leave the toes. Many a case of lameness was caused by the toes being too long and straining the tendons, and putting too much stress on the heels. With reference to shivering, he had once made a careful examination of a horse for an Edinburgh farmer, and had been very much surprised to hear later that his horse was a shiverer. The only time he showed the symptoms was when the saddle was put on his back.

Mr. Rutherford said that the paper might be divided into four or five sections, all of which could be freely discussed. In dealing with lymphangitis or weed in the horse, Mr. Elphick rather startled him as an old practitioner by stating that he no longer fomented, that he did not even bathe the limb, and that his treatment was entirely confined to starvation and massage. He was not able to agree with Mr. Elphick in his treatment. He did not recollect seeing any very bad consequences from bleeding and giving a large dose of physic in such cases. Bleeding had fallen into disuse, but like many other things which had fallen out of use, bleeding for weed might be re-established, in some cases with benefit. He could remember a good many cases where prompt free and efficient bleeding in the first few hours after attack was followed by the best results. However he did not bleed now, and had not bled a horse for weed since he came back from India many years ago. There the disease was very common, though not so common as here, where there was a thick legged heavy class of horses, and because the disease affected the heavy horse much more than the lighter bred horses. Bearing in mind the fact that they had an acute inflammation of the glands situated in soft tissues and that the natural termination of a weed when left to itself was effusion, it seemed to him the right course of treatment was to follow the indications of nature, and bring about a state of things that nature would bring about if left alone. That they could do best by the immediate application of hot fomentations to the groin. The other form of weed was a very serious one; he had seen many horses die of weed, but not from weed in the groin—weed affecting

the glands in the vicinity of the hock and below the hock. They occasionally got a weed in the fore limb below the knee, but in the hind limb they more frequently got very serious weeds which taxed the patience and skill of the veterinary surgeon when it affected the limb below the hock. The reason it caused so much trouble there was because there was not so much opportunity for effusion as when the glands higher up the limb were affected, when they had all the soft tissues of the thigh to permit of free exudation. He did not agree with Mr. Elphick's treatment of weed—starvation and massage. He always limited the feeding in any case of weed and encouraged massage and hand-rubbing and exercise, but only after the pain had left the limb and the temperature had begun to fall. Prior to that his treatment was hot fomentations. He had seen good results from cold applications, but he thought cold applications to an inflamed limb entailed a certain amount of cruelty at certain times, such as in winter. He recommended hot fomentations or turpentine liniments freely applied if there was no hot water handy. With regard to the observation that shoeing smiths should undergo a course of training and an examination in rudimentary knowledge of the anatomy and physiology of the foot, with the view of making them better shoeing smiths, as an employer of shoeing smiths for many years he would say that it was his opinion that the less a shoeing smith knew about the anatomy and physiology of the foot the better it was for his employer. If an employer had a knowledge of the anatomy and physiology of the foot, and of the principles of shoeing, it was his place to tell the shoeing smith what to do, not for the shoeing smith to tell his employer, as he soon would very often want to do.

Mr. BAIRD said the instances of shivering and roaring mentioned by Mr. Elphick struck him as peculiar. He could bear him out in the difficulty in detecting some cases of roaring. He has been almost taken in in one case of a pony. It had been bought with a warranty, but the people had evidently found out that it was a roarer, and he was asked to examine it and give a certificate. He galloped the pony almost to a standstill and found nothing. He was then asked if he would have any objections to trying it in harness as it was in that way they had found that the pony was not right in his wind. He had a properly fitting set of harness put on to the pony and gave it a good sharp trot up a hill when the roaring was intense. No one could have been blamed for passing the pony with a trial such as he gave this one in the first instance. He was at one with Mr. Rutherford in his treatment of weed. He always administered a purge and fomented the limb with good results.

Mr. HENDERSON asked what symptoms of shivering the horse showed when he was taken up to the water in the case mentioned by Mr. Elphick.

Mr. WILSON said that when they had a lame horse to examine they might have no difficulty in diagnosing the case if they had a text book beside them and looked up the symptoms which were said to be diagnostic, but in his opinion there were few cases of lameness with diagnostic symptoms. In every case they had to make a thorough examination to find out the cause of lameness. In nearly all veterinary books they were told that if a horse was trotting lame and walking sound they might swear he was lame from splint. He did not believe that at all, because they would find lots of horses that would go lame trotting and trot sound, and which had no splints at all. They would often find them lame from corns and other things. If they jumped to the conclusion that the horse had splints they would very frequently find themselves wrong. It was the same with a great many cases of lameness. The only way to satisfy oneself was to examine the patient with patience and perseverance, and to take no heed of what the owner might say about taking a long time, and that he thought the lameness was here or there. They should follow their own ideas, and tell the owner what was wrong when they had made up their minds. He saw coarse hocks frequently; that is hocks with largely developed bones. Coarse hocks was a term which covered a certain amount of ignorance, and ought to be done away with. The hock was either spavined or it was not. If a hock was coarse just because the bones were extra well developed there was no necessity for mentioning it, because the hock was still a sound hock. There were some cases of lymphangitis in which bleeding was beneficial. If they bled a horse with a strong high pulse in the early stages, it produced a certain amount of relief, the more severe symptoms became ameliorated in a short time.

There had been a lot of discussion since he qualified with reference to pupilage—about sending students to undergo a course of training with veterinary surgeons in practice. Before they could inaugurate a system of pupilage which would be of value to students, a board would have to be formed to examine the men who were going to take the pupils. There were lots of veterinary surgeons who were willing to take pupils with whom the pupils would learn a lot of things which they would require very soon to forget. That had nothing to do with the pleasant impressions and enjoyment which he had felt in listening to Mr. Elphick's paper, and he felt well repaid for his journey to Edinburgh.

Principal DEWAR said he felt very gratified with Mr. Elphick's address. He always had something practical to tell them. If he found the slightest trace of stringhalt or shivering in a young horse he always declared him unsound. Nothing developed latent shivering like a long railway journey or a sharp febrile attack, especially of an influenza type. With reference to lymphangitis he often wondered if there might not be something specific about it. They often got case after case in a stable, and he asked might not a stable get infected with lymphangitis? There was more than one form of lympangitis; he thought the condition mentioned by Mr. Rutherford, in which the region below the hock was principally affected, differed from the ordinary weed. He thought that in an acute case of weed phlebotomy was often useful, he had known bleeding to do a great deal of good many a time in lymphangitis, and he also believed in the value of hot fomentations in acute cases. When a horse was acutely ill he did not believe in exercising him until the fever and pain had to some extent departed. If they exercised a horse when acutely pained the exercise dispersed the effusion to some extent, no doubt by aiding the circulation; but there was a great tendency for the swelling to recur and increase as soon as the horse was returned to the stable and had stood a bit, and it was then more likely to remain permanent than if the limb had only been massaged and bandaged until the pain had practically gone.

Prof. GOFTON said that contrary to Mr. Elphick's experience the only fatal cases of lymphangitis which he had met with were those in which a dose of opening medicine had not been given, or its administration had been delayed. He always gave a good dose of opening medicine at the commencement of a case and he considered it an important factor in bringing about a recovery. With reference to the small bony growth met with on the upper part of the first phalangeal bone, he thought it differed from splint, and that the explanation of the difficulty so often experienced in relieving the lameness which was associated with it was because the growth was a manifestation of an inflammation of the bone, and not a simple periostitis. The inflammatory changes often affected the articular surface of the bone. Referring to the use of cocaine, he thought a word of caution was necessary in these cases. If they were to

forecast the disappearance of this lameness after the injection of cocaine over the plantar nerves they were almost certain to be disappointed.

Mr. ELPHICK, in reply, said he felt highly gratified by their appreciative remarks. To some extent he agreed with Mr. Storie with regard to pupilage, but he did not think it would ever answer to make it compulsory. He would apply pressure indirectly by instituting a good sound practical examination which should be carried out by a good every-day practitioner. That would indirectly make it compulsory for the student to obtain a practical knowledge, and there was no doubt he would obtain it. He believed they had great difficulty in the medical profession with their students in this connection, but since they had instituted a practical and clinical examination the students acquired the knowledge that was necessary for the successful carrying out of their profession. If there was a good sound practical examination instituted in connection with veterinary students, it would indirectly compel them to obtain their knowledge somewhere, it was immaterial where they got it so long as they got it, whether from a private practitioner or whether they picked it up themselves.

With regard to shoeing, he agreed with Mr. Storie that if a horse's feet were allowed to grow too long they affected the tendons, because length of toes threw weight back on the heels and brought an enormous strain on the tendons and fetlock joints, and thus was frequently a cause of lameness. What he meant when referring to shortening of the toes was shortening them abnormally. Horseshoers, grooms, and owners like to see a neat natty foot, and remark how beautifully the horse had been shod, but often after dressing the foot like this the horse can scarcely move for several days. That was mutilation of the foot. It was exceedingly beneficial for horseshoers to have some elementary knowledge of the anatomy and physiology of the foot. Each time a blacksmith shod a horse he was to a certain extent performing a surgical operation, and in performing it it was absolutely necessary that he should have some knowledge of what he was working on. He did not think the horseshoer would turn round and begin to dictate to them and tell them he knew as much as they did. Last year he was examiner and lecturer in the the horseshoeing competitions at the Royal Show at Newcastle-on-Tyne and the men who went through the competition and had a good sound knowledge of the anatomy and physiology of the foot were by far the superior men in shoeing the horses, and those who had the misfortune to get a bad foot made a wonderfully good job of it. They could not always watch horseshoers, and grooms and owners came into the forge and laid down all kinds of laws as to the shoeing of their horses, sometimes they wanted the horses shod upside down. The majority of horseshoers were masters working for themselves, and it was right that they should have a sound knowledge of the horse's foot and of horseshoeing.

With reference to Mr. Rutherford's remarks on lymphangitis: after meeting those very bad cases which resulted in death, he thought he would try the opposite treatment, and he had been most successful with it. The application of hot water had a great tendency to relax the blood vessels and create an increased amount of swelling and effusion which it was almost impossible to get reabsorbed. With the treatment he adopted he had very little or no enlargement of the leg afterwards. In very acute cases a good bleeding would no doubt be very beneficial, and he saw no objection to it. With regard to the cases of lymphangitis affecting glands in the region of the hock he could not say that he had seen any of these cases which he had recognised as lymphangitis, and he agreed with Principal Dewar that when they got these cases there was a special cause at work and they differed from the ordinary weeds. Once a horse had an attack of lymphangitis the question of a recurrence was important, and if a horse stopped his week's work on a Saturday he should be put on cold mashes till Sunday night, and he ventured to say that they would seldom get a repetition of the trouble. He quite agreed that in very acute cases of lymphangitis it was practically impossible to get a horse out of the stable, and to compel a horse to move in that condition would have a tendency to do a great deal of harm, and would amount to an act of cruelty.

Mr. Henderson had asked for the symptoms of shivering shown by the horse when led up to the water. The water was standing in the middle of the yard, and when the horse got within ten or twelve yards of it he showed the symptoms. If they had tried to push him forward they could not have done it. He had had no experience of shivering being rendered more pronounced by a long railway journey, but he thought it was highly probable that it would be. He agreed with Mr. Wilson in the difficulty in localising some cases of lameness, and also that every horse that walked sound and trotted lame was not lame from splints. They all made it a practice to take off the shoe and examine the foot of a lame horse, and it was only reasonable to suppose that if there was anything wrong they would find it. They need not be afraid to take the shoe off again and again till they were quite satisfied that there was nothing wrong with the foot. It was difficult at times to differentiate between coarse hocks and spavins. Over and over again cases were tried in the law courts where one veterinary surgeon said a horse had spavins and another said they were only coarse hocks. If the veterinary surgeon had said at the first that the horse had coarse hocks there would have been no litigation at all, and the owner would have taken no notice. Prof. Gofton had referred to the use of cocaine in cases of lameness about the fetlock, and he had no doubt Prof. Gofton had had more experience of its use than he had, and he was probably right. As a rule in the cases he mentioned they had visible evidence of the seat of lameness, and there was little need for cocaine.

The SECRETARY asked the members to accord Mr. Elphick a very hearty vote of thanks for his interesting address. They also owed him thanks for his generosity, for he had offered, on behalf of the Society, to make himself responsible for Mr. Elphick's expenses, but Mr. Elphick would not accept his offer and had come through from Newcastle at his own expense. (Carried with applause.)

The CHAIRMAN said the discussion had been very lively, and it gave him great pleasure to convey to Mr. Elphick their deep appreciation of his goodness.

A vote of thanks to the Chairman closed the meeting.

A. GOFTON, *Hon. Sec.*

Claim for Alleged Horse Poisoning at Lancaster—Mouldy Maize.

The adjourned hearing of the action was taken before Justice Hans Hamilton, at Lancaster County Court, on Friday, 2nd inst., in which the plaintiffs, the Lancaster and District Tramway Co. sued Messrs. T. Jackson & Son, corn millers, Damside Street, Lancaster, for £100 damages for breach of warranty in respect to certain provender purchased by the plaintiffs from the defendants under a contract made in Sept. 1908, or in the alternative £100 damages for alleged negligence. Mr. Wingate Saul (instructed by Messrs. Clark, Oglethorpe & Sons) appeared for the plaintiff company, and Mr. Pope (instructed by Mr. J. Tunstall Sanderson) for the defendants.

The previous hearing was reported in our issue of May 15, p. 777.

Mr. Robertson inspected the food, and it was alleged he found the oats were dirty, the beans contained parasites, and the split Indian corn was partly fermented and mouldy. He gave instructions for the horses to be fed on chopped hay and oats, and on no account had more Indian corn to be given to them. Eventually three horses died, "Pepper Box" on Oct. 20th, "Major" on Nov. 3rd, and "Baby" on Dec. 29th. A post mortem on "Pepper Box" showed that death was due to septic pneumonia. The plaintiffs alleged that the other horses died from septic poisoning, and claimed £35 for "Pepper Box," £35 for "Major," and £26 for "Baby."

Prof. Williams: In the course of further evidence on Friday, explained how corn was affected by moulds. Corn had on its outside surface some spots of moulds which without moisture were incapable of growing, but should the grain be split and moist, these spores would grow into visible moulds. The grain had not only been affected externally, but infected internally, destroying the nutritious portion of the Indian corn. Consequently it was only the refuse of Indian corn after the growth of moulds. It was possible for intact grain to become infected from the soft white spot at the top of the grain. Such grain invariably gave rise primarily to irritation of the bowels and kidneys, as described in Mr. Roberts' evidence. Bad food caused irritation of the bowels, which contain organisms of all descriptions, but healthy bowels had the power of resisting invasion by these organisms. When bowels became diseased or irritated, the power of resistance was lost, and invasion took place. These organisms gained entrance to the blood stream, grew and multiplied, and many of them gave off a poison generally spoken of as a sepsin, toxin or ptomaine. These organisms in the course of their travels got into the lungs, became obstructed in the minute blood vessels of the lungs, and when arrested there gave rise first to inflammation and then to the formation of an abscess, and pus formed in the blood. The amount of poison excreted by these multiplying organisms was so great that the animal died. Not only did they have the formation of the abscesses in the lungs, but might also have them in the liver and kidneys. Witness confirmed Mr. Robertson's evidence as to the condition of the horse's lungs, kidneys and intestines of "Major," and was of opinion that the animal first had the bowel and then the lung affection. There could be no other cause of death than blood-poisoning, the primary cause of the disease being the moulds on the corn.

Cross-examined: The tube tests proved the grain was bad and capable of causing the disease of which the horses were certified to have died. He would be surprised to find that an analysis of this corn sold to the Tramway Co. compared favourably with sound River Plate corn, but he could explain such a result.

Mr. Pope said the analysis was in respect to moisture, oil, albumenoids, starch, etc., and read the comparative analysis as follows:

	Jackson's	River Plate
Moisture ...	12·65	11·10
Oil	3·90	4·93
Albumenoids ...	10·75	10·25
Starch ...	70·28	71·17
Wood fibre ...	1·07	1·20
Minerals ...	1·35	1·35
	100·00	100·00

Mr. Pope asked if this did not show that Jackson's corn had undergone no constructive change in the starchy constituent.

Witness pointed out that the proportion of the various substances mentioned, varied in accordance with the constitution of the material that was analysed. As an illustration he pointed out that if the central portion of an apple was taken, including the seeds and the core, it would be quite possible to obtain on analysis from that portion of the apple the constituents of prussic acid. If portions of the apple without the skin and core were examined, no trace of prussic acid might be found. Consequently the central portion of Indian corn had its constituents in different proportions and ingredients to the external portion of the Indian corn. If the outside and the central portions of this corn had been examined, the analysis would have shown a different proportion. It was not a fair analysis.

Mr. Pope: Do you suggest that the analysis was not of whole grain?—I say it was only the outside portion. If you take the grain sent for analysis purposes you will find that the centre has disappeared. I should like to look at the sample from the box of grain Mr. Sanderson had at last Court.

Do you say that what was sold as grain by defendants was nothing but husks?—No, I did not.

You said it was not grain but the refuse of corn after the growth of moulds?—That is quite a different matter. This was the refuse of corn and what was left after the moulds had fed on it.

Your statement is made not on analysis of the corn, but merely generalities, and yet you say "Your corn is nothing but refuse"?—I say some portions of it.

Can you pick out some?—Yes, here are a few.

Have you made experiments with any of the other provender?—No.

You say that the presence of moulds is a sign that the grain is bad. You say that the growth of the moulds in gelatine is proof that the article is not fit for food for cattle?—I say that sound grain may have on the outside accidentally spores of fungi.

Did you examine for moulds the other provender given to the horses—the oats, beans or bran?—No.

I put it to you that the cultures you produce in the test tubes can be grown from the finest samples of corn or provender?—I will answer that question if I may explain. Yes, it is possible for perfectly healthy grain to have on the outside some of the spores of the various moulds, but these spores cannot under healthy conditions do any damage to the grain.

His Honour: What is your opinion about the grain?—My conclusion is that the corn had been heated, probably on board ship. When grain is heated it is moistened; in fact it is from the moisture that the heating originates.

Mr. Pope: Are you assuming that because you grew moulds in gelatine that it is evidence this corn had been heated?—Yes.

When grain has been heated on board ship it is customary to dry it?—Yes, and by drying grain you kill the fungi.

Do you suggest the grain had be treated in that way? No, I suggest the spore infected—

Mr. Pope: Don't go beyond your brief.

Mr. Wingate Saul: I don't think you ought to say that.

Mr. Pope: We shall say something more before the case is finished.

His Honour: Expert witnesses are entitled to be treated as professional gentlemen, and not as hostile witnesses. In these days we must try to be more courteous to gentlemen who come in a purely scientific capacity.

Mr. Pope: My friend's levity caused me to use an expression of impatience.

Mr. Pope: Cannot moulds be grown on every class of provender for horses?—You can obtain them from other foods supplied to horses, but not necessarily. You can have moulds on the outside and the grain itself be intact. In this case the mould was growing in the substance of grain.

Could you not have alleged that the other foods had

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CASE II.—Right Tibia: skiagraph taken 16 weeks after fracture reduced.

Two photographs taken on 23rd June, four months after the first fracture, Case III.

CASE II.—Left Tibia of same dog.
Photo by S. A. Notcutt, M.A. L.L.B. Ipswich.

CASE III.

CASE III. (B).

First fracture of right radius and ulna, and dislocation of humero-radial articulation reduced 23rd Feb. 1909; 2nd fracture of radius and ulna caused by falling from chair on iron fender—reduced 9th March, 1909. Skiagraph taken 9 weeks and 1 day after date of 1st fracture.
(B). Left radius, ulna and portion of humerus of the same dog—age 2 years.

To illustrate notes by Mr. H. L. Roberts, F.R.C.V.S.

caused the disease?—If the other foods had been in this condition and had moulds, I should have said they had done so equally.

Was the corn in a decomposed condition because the test tube had shown a growth of moulds?—No, the moulds were in the substance of the grain.

Before you unequivocally charge the corn with being the cause of the mischief, you would have to be satisfied that the other food given to the horses did not contain some moulds?—I convict the corn.

His Honour: This is a matter of argument.—It is quite sufficient for me that the corn was bad.

Mr. Pope: Had you experimented on the moulds to see if they create the illness you allege?—No, I have not, I couldn't.

Why?—The animal would have died. There is a limit to experiments.

Mr. Pope: Some of the corn was taken from a box by Sir John M'Fadyean, the present Principal of the Royal Veterinary College, London, at last court. You know Sir John?—Yes. I have great respect for him.

His Honour: We don't want anybody to give him a character. (Laughter).

Witness: I had so much respect for him that I dined with him last night. (Laughter).

Mr. Pope: Well, Sir John placed a number of grains on sterile bread-paste and obtained a crop of moulds. He used the crop on two other dishes of bread-paste, and developed abundant growth of moulds and bacteria, which he estimates would compare with the amount of mould and bacteria which would be present in several bushels of the grain. He fed a horse with the whole moulds, and no bad effects resulted. Would you be surprised to hear that?—Not at all.

It is a very severe test?—It is.

You have already said it would not be fair to feed any animal on the mould.

His Honour: He said it would die.

Prof. Williams: In any case, you have damaged grain as well as fungus.

Mr. Pope: Do you agree that septic pneumonia is highly infectious amongst horses?—No, not septic pneumonia. Not unless it is the destructive disease known as infectious pneumonia.

Is it not described as septic pneumonia?—No.

What is septic pneumonia?—It is a second disease, consequent on the absorption of septic material from some other part of the body. For example, a horse has an injured hock, and the wound in the hock becomes poisonous. The poison is absorbed from the hock into the circulation, and is carried by the circulation to the lungs, and gives rise to septic pneumonia and death.

Do you suggest septic pneumonia is not a comparatively common disease amongst horses?—It is not. Septic pneumonia and septic infectious pneumonia are different in the way they attack the lungs.

Did you examine the horse's lungs?—Yes. The condition was not consistent with the horse having died from pleuro-pneumonia.

But there was running at the nose and a cough, are they not indicative of pleuro-pneumonia?—It may mean bronchitis. It depends on what the discharge is, and the character of the cough.

Mr. Pope: No doubt it does.

Witness: Then why ask such foolish questions? (Laughter).

Mr. Pope: You are right it was a foolish question.

Witness, in reply to His Honour, said that a horse with infectious pneumonia had two different discharges. The period of incubation was about a week.

Mr. Pope: Are outbreaks of pneumonia common to large studs?—Contagious equine pleuro-pneumonia, or the disease generally known as influenza.

Do you draw any distinction between influenza and typhoid?—They are all of the same type.

In about 80 per cent. of the fatal cases of common pneumonia the lungs are septic?—Ordinary contagious pneumonia.

You told me that common pneumonia is not contagious?—Any form of pneumonia may terminate in septic pneumonia.

I suggest that your opinion as to what led to the death of these horses is opposed to everyday experience and contrary to the accepted authorities. Do you agree?—Certainly not.

What can you refer me to?—Half-a-dozen books that are accepted by experts in this country (pulling out some books).

Mr. Pope: Give Mr. Wingate Saul a list of six names and he can put them to my expert witnesses. Have you any reason to put forward for saying that these moulds do prove injurious in the way you have suggested. You have not experimented?—I have not experimented, but I have had practical experience for nearly thirty years of outbreaks of a similar kind. From the finding of the mould in the test tubes I have no doubt that the Indian corn in the condition described gives rise to the identical symptoms described by Mr. Robertson.

Re-examined by Mr. Wingate Saul: What is the difference between the condition of a horse suffering from ordinary pneumonia and septic pneumonia?

His Honour (interposing) said that Prof. Williams had impressed upon him that there was a serious difference between the symptoms of septic pneumonia which did not appear in the lungs of one horse, and the infectious pneumonia, which led him to think that the infectious pneumonia was absent and the septic pneumonia was present.

Mr. Wingate Saul said in that case he would curtail his re-examination.

In answer to further questions, witness said that if the moulds were growing on grain and it was dried, the moulds would be dried up and cease to grow. If a horse was very healthy, the effect of the moulds might disappear by digestion; but the damaged grain had a deleterious effect as well as the moulds. He should prefer to eat pure mould rather than mouldy food because there was decomposition in the food.

This concluded the case for the plaintiffs.

The Defence.

Mr. Pope, in his speech for the defence, first ascertained from Mr. Wingate Saul that he relied upon the breach of warranty implied by the contract to supply grain according to the sample. He contended that Messrs. Jackson had taken all reasonable care in supplying the corn.

His Honour: It is indicated there was some negligence.

Mr. Pope: There is no evidence of extreme negligence.

Mr. Wingate Saul: There is implied warranty that the corn was fit for the purpose it was supplied.

His Honour: Don't direct attention to negligence.

Mr. Pope said he wanted to show the whole history of the grain as far as he could trace it, and to prove that similar corn was distributed in Lancaster district without ill-effects. He proposed to show that the corn came from a consignment that was received in Lancaster and which they sold to 78 or 80 customers throughout the district. It was sold very largely in a split state as food for horses. He wished to show further that 4000 sacks of this corn came to Lancaster and the whole of it was disposed of in the neighbourhood, amongst others to Messrs. Jackson the defendants. In no other case had there been a complaint as regarded the character of the corn. He wished to say further that of all the corn sold to the plaintiffs, they only sent back four bags of split Indian corn, and one sack of mixed provender. He would prove that three of these sacks were actually resold to other persons in Lancaster, and the other was

kept for Messrs. Jackson's own horses—he gave the so-called damaged corn to his own horses. He was going to prove that Messrs. Pye's corn came from precisely the same shipment of corn as Messrs. Jackson's order. Messrs. Pye supplied the Tramway Company up to 2.30 p.m. on Oct. 2, but there was no complaint till the defendant's corn arrived and then a complaint immediately followed and defendants corn was attacked. He proposed to show in addition that a sample of the "damaged corn" was sent by the defendant's solicitors to Mr. Smetham, who was the official agricultural analyst for Westmorland and consulting chemist to the Cheshire Agricultural Society, besides holding the office of analyst to the Liverpool Corn Association. The analysis had already been before the court and showed that the grain compared favourably with the best River Plate corn. As to the result of the post-mortem he would have the assistance of some of the most eminent veterinary surgeons in the country. He thought he would satisfy His Honour that it was one of the most brilliant illustrations of that remark *post hoc propter hoc*. The cause of death had been stated in the particulars, as septic pneumonia and septicæmia. They did not repudiate that the horses died of septic pneumonia or pneumonia, but what they did say was that it was inconceivable that the death of the horse had been caused by their corn. This was the issue and the Court would have to be satisfied that the maize caused the mischief and that none of the other foods with which the horses were fed contained these moulds that were spoken of as injurious.

Wm. Lawson Jackson, one of the partners in the defendant firm, said he had carried on business for twenty years, and had supplied by tender a very large quantity of provender to the plaintiff's Company to the value of £6,317 without any complaints. He supplied provender value £1000 in the years 1906-7. In 1908 they secured the contract again. The Indian corn in question was purchased from Messrs. J. Blythe and Sons, of Liverpool. They got 700 loads from June 10th to November 9th. He examined every sack as it came in. It was very good corn or he would not have bought it. He could tell the quality of Indian corn by looking at it. They supplied about 80 customers from the same bulk, and as far as he knew no ill effects resulted from the corn being used. The Indian corn was received whole and was split by machine. Witness proceeded to detail what happened when the Tramway Company blamed the Indian corn. Mr. Peel told him in a trap as he was driving from the station that there was enough poison in the Indian corn to kill all their horses. He told him they would follow their usual business course and replace any grain that was not considered satisfactory. He told Mr. Peel his horses were well and were eating the same provender. Four loads of Indian corn and a bit of split were returned. While they were examining the corn Mr. Peel put his hand towards the sack and then put his other hand to his nose. (Laughter.) When witness left the stable he noticed that the midden was swelling badly. The corn returned was all right. The three sacks were sold to other customers in Lancaster: Mr. J. N. Yates, King's Arms Livery Stables; Mr. J. D. Bell, corn and flour dealer; Messrs. Yates and Jackson, brewers. He had sufficient confidence to execute these orders, and also to feed his own horses with the provender. Witness called in Mr. Harris as veterinary surgeon at the death of the second horse "Major." Samples of the corn were left in charge of his solicitor (Mr. Wilson) from whom Mr. Sanderson's clerk would afterwards receive them.

Mr. Wingate Saul: You say no complaint was made by the Tramway Company up to that time?—I swear that, sir.

Were you supplying corn in October, 1907?—Yes.

In reading from a letter dated October 19th, 1907:—"Messrs. T. Jackson and Sons, Damside Street, Lancaster. Dear Sir,—We regret to have to complain of the quality of the provender supplied by you on the 18th inst. It is altogether unsatisfactory, and such as we cannot accept. We have a sample at the office, and shall be glad if you will call and look at the same. Yours truly, J. R. Firth, secretary." Did you receive that letter?—I did not.

It is to your firm. How do you suggest it has got into the plaintiff's present copy letter book?—They can easy write a letter and not send it.

Have you ever received a complaint by telegram?—Never.

Have you ever received a complaint by telephone from Mr. Peel?—I have not.

Did you ever receive any corn back?—I have not sir. They never made a complaint.

When you went to the stables on October 12th Mr. Peel told you there was enough poison in the Indian corn to kill all the horses?—Yes sir.

Was that the only time you were told that?—Yes.

Were you not told by Mr. Long that there was enough poison in the Indian corn to kill all the horses?—No.

But you told Mr. Wilson so. It is in the letter?—No. I told him that Mr. Peel had said so.

And that Mr. Peel had telephoned complaints about the corn?—I'm certain he had not to me. He may have spoken to the clerk.

But Mr. Peel says he telephoned to Wm. Lawson Jackson, and that is you?—He never did.

Did you ask him why he wanted you to go to the stables?—I went to see the corn and he said there was poison in it.

Where did he tell you that?—When he asked me to look at it.

Did you say when you picked up a sample of beans "The beans are dirty and George should never have sent them?"—No, we have no George in the warehouse.

Harry was it?—No.

Did Mr. Peel say "This is what is doing the damage?"—No, he said "there was enough poison in the Indian corn to kill all the horses."

Did you take some of the corn?—I looked at it. It looked very nice and clean.

What did you do?—I offered to take it back if it didn't suit them.

Did they order more Indian corn from you?—No, sir.

When Mr. Robertson put his hand into the centre of one sack it was warm?—I don't think Mr. Robertson can tell corn when he sees it.

Mr. Pope: Answer the question.

Mr. Wingate Saul: Do you know Mr. Robertson has practised a number of years?—I have known him a few years.

Do you think he has come here to say what is not true?—He must have done. He knows he is wrong.

Mr. Wilson is wrong, Mr. Peel is wrong, and now Mr. Robertson is wrong. Do you keep any books showing the deliveries to you of Indian corn?—We don't keep any books in which we enter corn delivered to us.

How do you check your accounts when they are sent in?—We pay them at once, monthly.

You have no record to show the court as to your purchases of Indian corn?—No, only what I have bought the last few months. We have kept no books of purchases.

In reply to His Honour: I buy things on condition that I can refuse them if they are not up to sample.

Have you ever returned Indian corn or oats?—No sir, I buy the very best.

Mr. Wingate Saul (handing up a sample): If you got corn like that would you return it?—I don't think so.

Would you buy corn like that?—I would not take corn like this if I saw a sample like this.

Have you bought corn from Mr. Capscott Kitchens of Liverpool?—I have not.

Never? When did you last buy corn from them?—Two years since.

When did you supply the corn to Mr. Yates, Kings Arms?—On October 16th.

How many sacks?—A few crushed oats, with one sack of whole corn.

How much did you get from Blythes?—A hundred load at a time from September 16th. I have the invoices.

James M. Sutherland, the representative of Messrs. John Blythe and Co., corn merchants, Liverpool, in Lancaster and district said that for some five or six years he had supplied grain to Messrs. Jackson. The firm bought in Liverpool and abroad, and sent small cargoes to Lancaster. The corn in question arrived in Lancaster last August, and on September 20th he sold to defendants 100 sacks of sound River Plate corn, ex. s.s. "Lincolnshire," ex. s.s. "Farraday," and "Davy," which brought the corn to the Lune.

The corn supplied by the defendants to the plaintiffs in the first week of October must have come in the shipments named. Defendants also bought 50 sacks on August 27th, 50 on September 7th. He handed in the invoices. The cargo of corn brought into Lancaster on September 20th was between 4000 and 5000 sacks, and was sold to local corn merchants. The "Lincolnshire" cargo was a spot purchase of 10,000 sacks, at Liverpool quay. The corn which came to Lancaster was distributed between various dealers. The "Lincolnshire" cargo really went between Liverpool and Carlisle, Windermere, Barrow-in-Furness and Yorkshire. The corn was bought as sound corn and sold as sound. It was examined by their warehouseman who got a sample of the corn, and reported upon it to the firm.

Mr. Pope: In your opinion would it have fermented on the voyage?—This corn was perfectly sound and cool, or we would never have accepted it.

Can the buyer examining corn from a ship form any opinion whether or not it was heated on the voyage?—Yes, he can tell immediately.

From amongst the 4000 sacks sold by you, had you received any complaint that the corn was poisonous?—No.

How much did Messrs. Pye get?—350 sacks on September 7th.

The Tramway Co's., complaint is the solitary instance in which corn has been charged with poisoning the cattle out of 10,000 sacks.

Witness said he took a sample of corn to Mr. Smethams. He should give the corn unhesitatingly to any horses.

Mr. Wingate Saul: We have picked out the worst by now.

Mr. Wingate Saul: Was your corn not refused by Mr. Pye because it was heated—in October?—Messrs. Pye ordered 100 sacks, and paid for them.

Did Mr. Pye refuse to take the corn because it was heated?—I cannot answer that, but I know he bought and paid for 100 sacks of corn.

Did he ever complain?—I have some recollection of Mr. Pye saying the corn was not quite what he expected, but I had no knowledge of the corn being rejected.

Didn't he inform you he would not take the corn, and the bargain was off?—I don't think so.

Will you swear he didn't?—I cannot exactly swear that, but I can swear he has taken the corn and paid for the corn.

Did you agree for him to take 100 loads of the best corn at a second quality price because it was not up to quality?—He bought and paid for it.

Will you swear that none of it was sent back, or refused acceptance because it was heated corn?—It is not unusual for some corn to be sent back. Many a time corn is dusty.

If the corn is heated?—It is a most unusual thing for corn to be heated in Lancaster.

Is it usual to get corn ship-warmed?—It is usually taken to the grain storage and dried there by running over belts.

In further cross-examination witness gave the following sales to Jacksons:—August 8th ex. "Sperides," 50 sacks; August 22nd ex. "Lincolnshire" 50; September 7th, 50; September 16th, 100; September 20th, 100; November 7th, 50; December 2nd, 50; and December 14th, 50.

Mr. Pope here intimated that he had 20 witnesses, but would only call the principle ones, so as to shorten the case and get it completed.

Prof. John Penberthy, Dean Hall, Gloucester, F.R.C.V.S., and ex-President, for 26 years Professor of Medicine at the Royal Veterinary College, London, N.W., stated on November 5th, 1908 he received from Mr. J. H. Harris, veterinary surgeon, Lancaster, a part of "Majors" lung, the lymphatic glands, and abdominal cavity, stomach, large intestines, and portion of the spleen, along with a copy description of the post mortem. As a result of the examination he came to the conclusion that the horse was subject to contagious equine pleuro pneumonia. He had heard Mr. Robertson's evidence regarding "Major," and it confirmed the opinion he formed. There was an accumulation of fluid within the chest cavity.

Witness, in further examination said that the septic condition of pneumonia was the general condition of pneumonia. He received parts of another horse which had died on December 31st, from Mr. Harris, and also received a history of the horse from him. From the condition of the lungs, and the evidence he heard on the previous occassion respecting the post mortem, he had no doubt the horse died from contagious equine pleuro-pneumonia.

His Honour: Are you satisfied the three horses died from the same disease?—Yes, from what I have heard I believe that "Pepper Box" died of the same disease.

Mr. Pope: Tell us what is your view as to the common way in which a horse contracts the disease from which they died.—They invariably get it from contagion derived from an infected horse.

Is it conveyed from a horse that has the contagion?—In all ways; by the clothing of persons who attend it, by the visits of vets., by coming in contact with the air contaminated by the affected horse, and in the ordinary ways of infection.

Have you ever in your experience met with evidence or the assertion that this disease was caused by eating mouldy corn?—No.

In your view, from the evidence and the opportunities you had of examining portions of the dead animal, you form the opinion that the cause of death was septic-pneumonia?—Certainly, what is called septic pneumonia.

Do you call it by that name?—Sometimes, but the other is a much better name for it.

Have you ever found the disease contracted by horses being fed on split Indian corn?—No.

His Honour: You never have come across a case where the horse has died from disease like this by eating mouldy Indian corn?—No, never. I never heard the suggestion until this case.

Does it come with fresh light. Is it a new theory?—It is a novel theory in the light of experience. All things are possible (Laughter).

Mr. Pope: Do you say "The mould set up irritation of the intestines, and organisms which were lying latent in the animal then found access to the blood, and so create disease?—I say it must be a new disease, a new discovery, as far as I am concerned. In fact, I have no proof that the fungi I have seen has any effect on the alimentary mucus membrane of the horse. I cannot conceive of such germs getting into the blood stream of the animal. I am well aware that every horse daily consumes a large number of the spores of the fungus we see grown here. It is one of the commonest things. You only need the temperature of the medium. Under cer-

tain climatic conditions you can develop the organism in either animal or human food. There is, however, no proof that these moulds cause the irritation that is alleged.

Witness, continuing, said he did not have any authority for saying that the moulds caused irritation of the intestines or the statement that you got pneumonia from irritation of the intestines. If it was suggested irritation produced by the moulds was something very special, they might expect in every instance of irritation of the alimentary canal, the horse would become subject to septic pneumonia. To prove that the corn did not produce the disease in the tramway horses, he regarded as important the evidence that the bulk of the corn was distributed to 70 or 80 customers. He would expect similar signs from other horses. Unless the corn supplied to the Tramway Co. was different he should have expected outbreaks elsewhere; he would not say in the whole of the 80 cases, but in a very large proportion of them.

Mr. Pope: Assuming Messrs. Jackson were supplied from the bulk of 4000 sacks which came to Lancaster, would you expect if the corn was bad to have reports that many horses were ill?—Yes.

Apart from your deductions, is it your opinion that the disease from which these horses died was not contracted by eating mouldy corn?—I don't think that the disease from which these horses suffered can be attributed to eating Indian corn, good, bad, or indifferent.

In cross-examination Mr. Wingate Saul asked: Do you differ entirely from Prof. Williams?—No. I agree with him that the horses had contracted septic pneumonia, but I disagree that it was from eating Indian corn.

Both our witnesses are eminent gentlemen in your profession?—Yes.

In your opinion the horses died from contagious infectious pneumonia?—Yes.

If there was an outbreak of influenza amongst horses, would you expect horses which moved about like tram horses to spread the disease?—Witness replied that if it was confined to any particular stable he should not expect it to spread through horses working in trams. He did not know the life history of the micro-organisms, but it was a matter of clinical observation—for which he had had much opportunity—that disease was more commonly acquired from the stable than out of doors. If the horses were taken from one stable to another he would expect that other horses would become affected.

You have heard also there were thirty horses in the same stable not fed with this particluar food which did not contract this disease?—Yes.

Do you attach any importance to that?—I take the statement as made, but I don't understand it.

Taking the statement to be true, can you offer any explanation of it?—Except that the 30 horses would be less susceptible.

Then would it be an extraordinary coincidence if the 30 horses not fed on the food, but fed with other food by the same persons feeding the other horses, did not contract the disease, while 30 horses fed on the food did contract it?—It would be a curious coincidence.

You appreciate that it is strongly against your evidence?—I appreciate the fact that 30 horses did not contract the disease.

The evidence is that 30 horses were not fed on the Indian corn and did not contract the disease?—It is a coincidence, but it doesn't alter my opinion.

I understand you to say that mouldy food does not harm horses?—I have not in my experience had direct evidence of it. I have never seen an outbreak of disease which I can attribute to mouldy food.

You will not say that mouldy food has not a deleterious effect on horses?—I have had no positive experience and it is easier to prove the negative.

Would you feed your own horse on mouldy food?—I have been feeding my own horse and other animals, including rabbits, on moulds. I have been trying to feed them since last trial. They have swallowed the moulds on the bread paste, referred to by Prof. Williams, and they are perfectly well.

The same moulds?—They are always the same on Indian corn.

What are the moulds?—I cannot tell.

I am instructed that there are moulds deleterious and some not?—These are not poisonous moulds such as are taken from mushrooms.

Is it correct that there are moulds harmful and some not, some produce septic conditions and some moulds otherwise?—Yes.

Unless you can prove they are similar moulds your evidence is of no value?—I say these moulds can be produced profusely within seven days by cultivation.

Would you feed a horse on Indian corn you found warm in the centre of a sack?—Not until I cooled it.

Would it be likely to cause injury to a horse feeding it with warm Indian corn?—I cannot say it would.

Have you fed horses on heated corn?—Hundreds of times. I have had special opportunities to judge the effect of feeding with corn.

In further cross-examination witness said that infectious pneumonia could be inhaled or ingested—eaten in the food. Their knowledge was not finite on the point. They had no description of the individuality of the organism so as to demonstrate it by cultivation and inoculation of food. They could not speak positively about it, but it was generally accepted that the organism could in fact be inhaled, and also be swallowed.

His Honour: These horses started to be ill three days after they were fed with the corn?

Mr. Wingate Saul: Is that another coincidence?

Witness: It is not a coincidence of the effect of the food, it is coincident. (Laughter).

You have heard that the horses passed water freely and purged freely does not that mean anything?—The micro-organism would cause it.

Where do you say the organism would affect it first?—The lung.

You would expect the septic condition to start in the lungs and be distributed from them?—Yes, if that happened to be the point of invasion.

In the post-mortem would it be possible to trace the origin of the septicæmia through the system and put your finger on the point?—No, decidedly not, because the structure of the organisms differ in each portion and would cause you to be deceived.

Do you say it would be impossible for an expert person to trace where it started from?—I don't say it is impossible, but it would be very difficult for Mr. Robertson to do it.

Would you expect to find pleuro on the ribs if the lungs were the seats attacked?—There is a disposition for the pleura covering the lungs to be more commonly affected than the pleura covering the ribs.

Does it spread through the system?—I did not say so.

What colour would you expect to find the fluid?—Straw colour.

What is the general colour?—Anything between a straw colour and black, green sometimes. (Laughter).

You don't generally get swelling on the chest?—Not necessarily.

Often?—Yes.

Did Mr. Harris mention about swelling on the chest?—No.

Witness in further cross-examination said it was possible irritation set up in the intestines might cause a horse to have septic pneumonia. It depended whether the organisms were there which set up pneumonia which were taken into the circulation. He did not think septic pneumonia was the result of the absorption of toxins.

Re-examined: He had never associated the disease septic pneumonia with mouldy food. The suggestion of septicæmia or septic pneumonia in horses was not supported by his experience nor by the opinion of the profession, as far as he knew.

By His Honour: If the temperature of horses was high he would consider it was part of his duty to examine the food—to see what was going into the animal. If he examined Indian corn and found it fermenting and mouldy and soft towards the centre he would think it his duty to stop giving the horse that food.

His Honour: Thank you, very much.

Witness: I should isolate the animals. *Inter alia* I should first isolate the animal whose temperature was high, then get all the temperatures of the other horses taken. I should isolate those above normal and get them out of the stable under any circumstances, no matter even if I suspected the food.

His Honour: And if there was a pain in the stomach the first thing you would do would be to see if there was anything going into the stomach which should not be there?—All animals are liable to be very indiscreet in their food.

His Honour: Man is very indiscreet sometimes. (Laughter).

Sir John M'Fadyean, Principal of the Royal Veterinary College, holding the Chair in Pathology and Bacteriology, and many degrees, said he had come to the conclusion that the disease from which the horses died was septic pneumonia, as stated by Mr. Robertson.

Mr. Pope: In your opinion would it be reasonable or not to attribute the cause of death to mouldy corn—assuming it was mouldy?

Witness: It would be unreasonable until you have provided satisfactory evidence incriminating the corn.

You have heard the evidence of Prof. Williams and have seen the glass tubes enclosing fungi?—Speaking with a full sense of responsibility I think it is the greatest nonsense I have ever heard in a court of law. I intend to include in that statement my expression of opinion on the whole case, and say that the reasons that have been adduced here for maintaining that the corn caused the mischief in the horses are nonsense too. I maintain it is nonsenical to contend, before any moulds had been identified, that they have formed a toxin, which is the essential part of the case.

Mr. Wingate Saul: That is rather for His Honour.

Witness: It is nonsenical to come here and make general statements with regard to the whole fungi of the vegetable kingdom, and then to ask me or any other person to believe that poisonous fungi were present in the maize. That I hold from a pathologist's point of view to be nonsensical. It is unfair to say unidentified moulds are poisonous. I also say from the pathologist's point of view it is nonsensical to present as if it were a proved theory that any mould will cause septic pneumonia in horses. It is perfectly permissible for anyone to construct a fanciful theory, but pathologists will not accept that as more than theory until there is extremely strong clinical evidence, and I do not know of any in this case. These moulds can be cultivated in illimitable quantities, and are known to be extensively in forage. It is therefore easy to ascertain by experiment on horses whether they are harmful or harmless. I have made perfect experiments in order to ascertain where there was any evidence, there was present in this mould pathogenetic properties. I obtained a sample from Mr. Sanderson's clerk. The result of the experiment was that there was not present in the maize any organism whatever capable of doing any harm or injury to a horse when administered by the mouth, even in an enormous dose.

Mr. Pope asked witness to detail the experiments, but His Honour said you had better leave it alone, you may weaken your case. (Laughter.)

Mr. Pope: What do you say about the evidence of the effect of the moulds outside the grain and the moulds inside the grain on the food of the horse?

Witness: That was included in my opinion that it was pathological nonsense, and also nonsense from the common sense point of view. One might suggest that if you eat anthrax bacilli it matters little whether you eat the outside or inside. It is absolute nonsense to suggest that it is pathogenetic mould. It may be a good point with regard to the construction of the maize and its deterioration from a nutrition point of view, but not on the question whether the moulds will harm horses. I didn't give the experimental horses merely the moulds but give the horse the material on which the moulds had been grown, and which had been completely destroyed in consequence. I took the Indian corn and took bread paste and sterilised it, used the bread paste as soil for the fungi, which grew on the bread paste and altered it, there being an extensive growth. I gave the entire contents of the dishes of bread paste to the horses. It was so offensive and smelled so strongly that I could not induce my experimental horse to eat it until I had withheld food for 24 hours. I then mixed it with nine or ten times the amount of bran and oats. I have a license to make such experiments. The result of the experiment seems to have provided one solid fact bearing on this question. It is absolutely inconsistent with the view that the moulds or bacteria present in the maize was the cause of the illness of the Tramway Company's horses.

Mr. Pope: You have heard the post-mortem findings. You accept the view that the cause of death was septic pneumonia and septicæmia?—No, I think that was nonsense. There was no evidence of the horses suffering from septicæmia. It means the condition in which pathogenetic bacteria are multiplied abundantly in the blood. That is what is meant by septicæmia.

What is your view?—The post-mortem signs are consistent with the cause of death being septic pneumonia.

What is your experience?—I have had scores of post-mortems on horses and have found similar lesions on the lungs. I have had to do with it once since last court day.

Have you got a sample of that occasion?—I have, but I am not sure about the propriety of letting it loose in court. (Laughter).

His Honour: I am sensitive about them? Hadn't you better shut your bag. (Laughter).

Witness: Perhaps the experts on the other side would like to see it and recognise it. It has been preserved.

Sir John intimated he had brought other cultures, and proceeded to explain how septic pneumonia affected the parts, and described the symptoms. He had made experiments with sound maize received from London corn dealers, five samples, and found that they all grew moulds in the tubes. He planted six grains from each on some bread paste, and then put one into each tube. The result proved that the moulds could be produced from good grain, and there was no proof that the production of moulds on grain rendered the food unfit for horses. Unlike Prof. Penberthy, he preferred not to call it contagious pneumonia. It was the common type of pneumonia in horses. The three days which elapsed before the symptoms were exhibited by the horses were in favour of the corn. Had it been poisonous they would have been dead before the third day. There was nothing to show the cause of death was anything but septic pneumonia. In making post mortems on horses ill for a week, there were a variety of lesions, and he had the greatest trouble in determining what was their relative age or sequence.

Mr. Wingate Saul: You are complimentary to the members of your profession?—I am here to state the truth (Laughter).

You don't agree altogether with the last witness?—To

tell the truth I was not paying much attention to him, I was thinking about my own (Laughter).

In further cross-examination Sir John said that if in a stable of 60 horses he found illness amongst those receiving a certain class of food, it would be strong evidence that the illness was connected with the food, but many circumstances arose in a stud of 60 horses differently fed, and he did not think, in view of the distribution of the illness, that the food had anything to do with the illness.

Mr. Peel, manager of the Company here was recalled to state how the horses were stalled. About 40 were affected out of 62. The 22 not affected were placed on defendants' food because they were going out.

Sir John said it was possible Mr. Robertson had made a wrong diagnosis in distinguishing between colic and pleurisy. He had made mistakes himself, but he absolutely disbelieved they could produce anything like what they said happened to these horses by mouldy food. In abdominal troubles they had high temperature, but not always. In the experiments with test tubes it did not matter whether the maize was good or bad he could produce moulds.

Mr. Wingate Saul mentioned that Prof. Williams washed his grain with cotton wool, which Sir John described as "disgraceful to present an experiment like that," and pretend they could wipe away bacteria with cotton wool from the outside of the grains.

During a discussion as to what could be produced by the fermentation of the grains. His Honour remarked "You cannot get Irish whiskey from Indian corn. (Laughter).

Sir John in answer to Mr. Wingate Saul said the main value of maize was starch, and in that respect it was similar to bread, therefore the test with bread-paste as culture for the moulds was correct, as it furnished the same material. There was no evidence to show that a horse suffered any bad effects from eating heated maize.

Mr. Wingate Saul: Speaking generally, moulds do not produce irritation of the bowels?—I don't recollect ever having heard they have before this suggestion was made.

Mr. Geo. Marks Davis, M.R.C.V.S., Liverpool, and veterinary surgeon to the Field Artillery Brigade, had his confirmatory evidence accepted without occupying the time of the court, and other witnesses were excluded to finish the case.

Mr. Alfred Smetham, F.C.S., F.I.C., official analyst to the Liverpool Corn Association, Westmoreland agricultural analyst, etc. produced the analysis referred to above. He received no hint as to what poisons to look for in the sample of maize sent. After a most careful and extensive analysis he found no trace of poison. The corn was in a perfectly sound condition and perfectly fit for the food of animals. He did not know of a single case of poison resulting from grain moulds, and had never heard it suggested that mould was in itself poisonous. He had analysed perfectly sound River Plate corn, and the results were identical. The grain received from the defendants solicitors was no more decomposed than you generally found in a delivery of corn.

Mr. Joseph Dale Bell, corn and flour dealer, Lancaster, said he purchased a bag of maize returned by the Tramway Co., and his horses did not suffer in consequence.

Frank Parker, farmer, Quernmore, said he had one of the Tramway Co's. horses agisting and it had a cough. It broke down, and Mr. Ducksbury, veterinary surgeon, said it had pneumonia.

William Carr, farmer, Scorton, said he received 10 horses from the Company to agist in October, and they had colds, but got the open air treatment. (Laughter).

Robert Fox, farmer, Holleth, gave similar evidence in respect to four horses. The manager took one home.

Frank Woods, farm servant to Mr. Hilton, Heysham, said he was loading manure in September 1908 from the tramway stables, and "Pepper Box" was ill then.

Robert Birch, 16, employed by the Company last October, corroborated this statement, and said the stable doors were blocked with manure.

Mr. John Jowitt, agent to the Hornly Castle Estates, said that in September he purchased 80 loads of Indian corn from the defendants. They were consumed between September 8th and November 7th. Horses, pigs, and poultry were all fed and no illness resulted whatever.

Mr. Pope and Mr. Wingate Saul each made concluding speeches, and His Honour complained that he was being kept there an unearthly hour.

His Honour gave judgment at 7.30 p.m. He said the case had occupied a great deal of time and no doubt was of very great importance. It should really have occupied two days at an Assize Court, because the innumerable cases in the County Court precluded a county court Judge from sitting so many hours in one case of that important character. He had listened to the evidence with very great care. The question he had to determine was "Did these horses belonging to the Tramway Company die from the effects of eating this Indian corn?" It was a very difficult case, but had been extremely ably handled. They had heard some of the greatest experts and authorities on the effects of food on horses which was not of a first class character. It was the duty of the plaintiffs to prove their case fully. The evidence of the plaintiffs was extremely strong, yet the evidence given by the defence had shown there was extremely strong doubt, and that doubt had weighed in his mind as it would weigh in the mind of a jury. In my opinion it had not been proved sufficiently that these horses' deaths were caused by the corn as supplied by the defendants. Under such circumstances he gave a verdict for the defendants, with costs, which on Mr. Pope's application were increased to include three expert witnesses.

Melbourne University Veterinary School. Commemoration Dinner.

A dinner to commemorate the establishment of a Veterinary School at the Melbourne University was held on Tuesday, March 30th, at the Cafe Francais, Melbourne.

The Chancellor of the University, Sir John Madden, K.C.M.G., Chief Justice of Victoria, was in the chair, and amongst those present were the Vice-Chancellor, Sir Henry Wrixon, K.C.M.G.; the Minister of Agriculture, the Hon. Geo. Graham; the Lord Mayor of Melbourne, Lieut.-Col. J. Burston; the Director of Agriculture, Dr. Cherry; Prof. Spencer, Biology; Prof. Elkington, History; Prof. Osborne, Physiology; Prof. Berry, Anatomy; the Chairman of the Board of Health, Dr. W. Perrin Norris; Prof. Gilruth, Veterinary Pathology; the President of the Veterinary Board of Victoria, Mr. S. S. Cameron, M R.C.V.S.; Dr. J. W. Barrett; Mr. Mr. W. T. Kendall, M.R.C.V.S., late Principal of the Melbourne Veterinary College; Sir Henry Weedon, the Hon. George Swinburne, and the Hon. J. E. Mackey.

The loyal toast having been honoured,

Dr. J. W. Barrett proposed the toast of "The Founders of the Melbourne University Veterinary School." He said that a few years ago the University did not cater for properly training the men who would have to conduct the industries of the country. During the past seven years, however, they had established Schools of Agriculture, Education, Mining, and Engineering, and had made proper provision for the training of Dentists and Chemists. The last, and in some respects the greatest step, was the establishment of a School of Veterinary Medicine in connection with the

University. The late Government took the initiative and the present Government loyally accepted their predecessors' Bill, with the result that the measure had become law and the Veterinary School an established fact. Thanks were due to Mr. Swinburne, Mr. Mackey, Sir Thomas Bent, and the present Ministry for their cordial assistance, and also to the City Council for so promptly granting four acres of valuable land, right in the heart of the City and adjoining the University grounds, as a site for the Veterinary School buildings and Research Laboratory.

Prof. BALDWIN SPENCER, in supporting the toast, said he must confess that Universities had, up to recent times, been rather the home of conservatism. He thought that in Melbourne that stage had now been passed and the one aim was to make the University the seat of every kind of learning that would be of assistance to the public and the nation. A School of Agriculture two years ago and now one of Veterinary Science were perhaps the most useful developments in recent times, and we had to thank the members, not only of this Government, but of the previous Government also for the keen interest they had shown in these matters. It was to the very kind feeling of the City Council, together with the generous support shown by the Minister for Agriculture that we had had handed over to us a site for this Veterinary School.

The Hon. GEO. GRAHAM, Minister for Agriculture, in responding, said that he had done but a small part in bringing the Veterinary School into existence. It was true that, with the help of a sympathetic House he had managed to get the Bill passed through Parliament, but in this case the whole of the credit was due to Mr. Swinburne, Sir Thomas Bent, and Mr. Mackey. He was satisfied that but for these gentlemen there would have been no Veterinary School to-day. We should not forget what our old friend Mr. Kendall had done for the School. He established a Veterinary College in Melbourne, and many of his students were now filling very important positions in this and other countries. He did not know how Mr. Swinburne had secured the services of Mr. Gilruth as Professor and Dean of the Veterinary Faculty, but was satisfied that we had the right man in the right place. Sir Henry Weedon had taken an active part in negotiating for the gift of the land. The present Government would be only too pleased to do all in its power to assist the Faculty and Prof. Gilruth in bringing the institution to a successful issue.

The LORD MAYOR said that the City Council and Parliament were both very sympathetic in regard to the establishment of the Veterinary School. The proposal had received the support, not only of the city interests, but of the country as a whole. He was delighted to know of the recent development of the University of Melbourne, for at this time of day it was more particularly on practical lines that the University should extend. The City Council was fully alive to the necessity of developing the meat trade, both home and export, and of securing a good and wholesome supply. In this and other respects the Council was endeavouring to raise the standard of the food supply. For that and other reasons the founding of this Veterinary School in connection with the University was a step the citizens were never likely to repent of. The present occasion was a unique one in the annals of Australia, and in years to come when the Veterinary School had developed it would be regarded as one of the historic events in the career of the Melbourne University. If there was found to be insufficient room in the four acres, and it was necessary to secure another paddock, no doubt the City Council would be able to do something in the matter. With our large increase of trade and continuously expanding cattle markets, it was of very great interest and value to the State that we should have a body of men ready to take the lead in improving the meat supply, and in showing both producers and retailers how they could place the trade on the best, most healthy and satisfactory condition.

Hon. GEO. SWINBURNE, in responding, said he wished acknowledge the good work accomplished by Professors Berry and Osborne, Mr. S. S. Cameron and Mr. Kendall. He said they had been three years trying to get the School established. He referred to Mr. Kendall's efforts as being worthy of the very highest appreciation, and was glad they had been able to secure the services of Professor Gilruth. He thanked Mr. Graham and the present Ministry for endorsing the grant of £10,000 and the annual endowment of £4000.

The CHANCELLOR (Sir John Madden), in proposing the toast of Mr. Kendall, said he would ask them to drink the health of one whom he might well call the father of veterinary science in Victoria. He had always known him as an admirable citizen and an honourable and worthy man. He would remind those present that he was the first to undertake the responsibility, with the attendant sneers and scoffs, drawbacks and discouragements, of establishing a Veterinary College in Victoria. He had started a private hospital in Melbourne, and associated with it a Veterinary College. The result was that he had passed through his College 136 students, of whom 60 had gone out as well equipped and well taught graduates. Finally he had now handed over to the University 24 students from his own College. The University was very glad, as also were his students and friends, that not only did his College come over to the University and also his pupils, but in addition, he himself was to be the lecturer on Veterinary Medicine at the new Veterinary School. He felt sure that Prof. Gilruth and Mr. Kendall would do credit to themselves and to the institution to which they had become attached. The Minister for Agriculture had said that someone had stolen Prof. Gilruth from New Zealand, but it did not matter if you were found in the possession of stolen goods so long as you did not know they were stolen. It was not surprising that when Universities were first established they were nothing if not conservative. They were founded in anything but favourable circumstances. It was owing to the tumult and disorder and bloodshed outside that people of philosophic, studious and peaceful dispositions gathered together in Universities primarily, that they might be able to follow their own bent without rude and forcible interruption. While they were developing their philosophies they were in danger of being burned at the stake for their adherence to philosophic principals. Therefore, Universities in the beginning were very self-centred, conservative, and precautious of what they did, and thanking God every day that they were able to do anything. In these modern times, when Universities are able to take the bit in their teeth, they can carry as far as who cares the practical applications of science and art. We all heartily and fully appreciate Mr. Kendall's services, and he had great pleasure in presenting him with an inscribed address. Mr. Kendall had never hesitated to walk in the path of duty, and had resisted every temptation to be turned aside from it. We were all anxious to present a "Dreadnought" to the British Empire, but if we could spare Mr. Kendall, he knew of no better "Dreadnought" that we could present than he.

Sir JOHN MADDEN then presented Mr. Kendall with an address and a life-size portrait in oils of himself, subscribed for by members of the veterinary profession, to be hung within the new University Veterinary Building.

Mr. W. T. KENDALL, in responding, said he wished to express his sincere thanks and his appreciation for the handsome manner in which his services had been recognised. He could conceive of no other way of so doing which would have gratified him more. He regretted to say that some of those gentlemen who had assisted him had passed that bourne whence no travel-

ler returns; others had gone to various parts of the world. He acknowledged the very great assistance given to him by Mr. Cameron during a very critical period. He was with him at the time when they had to fight for everything they got. It was largely due to his efforts that they had the University Veterinary School established to-day. As far as Prof. Gilruth was concerned, Wellington was not more pleased to see Blucher than he was to welcome Prof. Gilruth to the Chair of Veterinary Pathology. We had now one of the best institutions in the world, and the Government would never regret having set aside the necessary money for the establishment and development of the University Veterinary School.

Sir HENRY WRIXON (Vice-Chancellor of the University) proposed the health of the Incumbent of the Chair of Veterinary Pathology and Dean of the Faculty of Veterinary Science in the Melbourne University (Prof. Gilruth). He said Prof. Gilruth did not come to us as a stranger. He brought to us a career which was well known all over the world. He had made a name in Europe, and we all knew how prized he was in New Zealand. We would gladly welcome him here as a man wanted at this particular hour. We had in him a man who united a thorough knowledge of the science he taught with a knowledge of the man to whom he taught it. There was a deep feeling in many of the people that we ought to utilise all our science and teaching and intelligence in order that it might be made easier for every man to do the developmental work of this country with better prospects for himself. We could not have a better man to further this end than Prof. Gilruth.

The toast was cordially honoured.

Prof. GILRUTH, in responding to the toast, said that one of the chief reasons that decided him to take up the onerous duties to which he was called by the University of Melbourne and the Government of Victoria was that this work opened up a great field for research and investigational work. He had been much impressed since his arrival with the enthusiasm shown with regard to this movement. He had never in his life been associated with a proposal to which so many people devoted their enthusiastic and energetic support without—so far as he was aware—a single individual having an axe to grind. In this respect the inauguration of the Melbourne University Veterinary School was almost unique. The late and the present Governments had acted with the utmost courtesy and consideration, and had enthusiastically supported the whole scheme. The University authorities, although it had been clearly stipulated that no money voted to the Veterinary School could be converted into other University channels, had done all in their power to assist. Then, again, the City Council came forward with a gift of land valued at about £20,000 and handed it over to a University over which they have no control. The public had also shown their appreciation in a practical manner. A scholarship of £100 had been donated by Sir Richard Cooper, a resident of England, and another one had been established by Mr. Payne of this City. Gold and silver medals have been donated by the Hon. Geo. Graham, the Hon. Geo. Swinburne, and others, and he was glad to see that substantial encouragement had been offered for the carrying out of veterinary research work. He was pleased to be associated with Mr. Kendall, and trusted that the establishment of the Veterinary School would be fraught with great benefit to the whole of the community. He felt justly proud to have had the position of Director of the new school and laboratory conferred upon him, and it would be his utmost endeavour to make the institution a pronounced success.

The toast of "The Chancellor" brought the evening to a close.

DISEASES OF ANIMALS ACTS 1894 TO 1903. SUMMARY OF RETURNS.

Period.	Anthrax.		Foot-and-Mouth Disease.		Glanders (including Farcy)		Rabies. Cases Confirmed.		Sheep Scab.	Swine Fever.	
	Out-breaks	Animals.	Out-breaks	Animals.	Out-breaks	Animals.	Dogs.	Other	Out-breaks	Out-breaks.	Slaughtered *
GT. BRITAIN. Week ended July 10	25	31			7	21			2	42	237
Corresponding week in 1908 ..	12	21			19	50			..	37	294
Corresponding week in 1907 ..	14	21			20	47			1	57	196
Corresponding week in 1906 ..	6	15			26	84			2	18	153
Total for 28 weeks, 1909 .. .	761	1006			318	1215			461	1000	9075
Corresponding period in 1908 ..	642	858	3	112	451	1439			629	1268	6558
Corresponding period in 1907 ..	634	843			511	1232			403	1455	6690
Corresponding period in 1906 ..	539	809			617	1178			289	683	3760

Board of Agriculture and Fisheries, July 13, 1909	Parasitic Mange. Outbreaks.			
IRELAND. Week ended July 3	..	19	9	230
Corresponding Week in 1908 ..	..	4	7	98
Corresponding Week in 1907 ..	3	4	3	29
Corresponding Week in 1906 ..	2	3	2	5
Total for 27 weeks, 1909	52	304	59	1027
Corresponding period in 1908 ..	25	269	117	2177
Corresponding period in 1907 ..	54	182	66	1185
Corresponding period in 1906 ..	56	148	51	599

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, July 7, 1909

NOTE.—The figures for the Current Year are approximate only.

* As Diseased or Exposed to Infection

COUNTY OF LONDON.

Diseases of Animals Acts and the London (Parasitic Mange) Order, 1909.

The London County Council being the Local Authority for the County of London (exclusive of the City of London), hereby gives notice as follows:—

On and after the 1st of June, 1909, every person having in his possession or under his charge in the County of London a horse, ass or mule affected with or suspected of parasitic mange, shall—

(*a*) With all practicable speed give notice of the fact either to one of the Council's veterinary inspectors or to the Police.

(*b*) As far as practicable keep the affected or suspected animal separate from other animals.

The owner or occupier of any premises on which there is an affected or suspected animal shall give all reasonable facilities to the Council's inspector in making any enquiry as to the existence of the disease.

Horses affected with the disease must be detained and treated as described in the notice of the veterinary inspector.

Premises, utensils, mangers, harness, etc., must be cleansed and disinfected as provided for in the regulations of the Council.

An offence against the requirements of the Order renders the offender liable to a penalty of £20.

Parasitic mange often begins on those parts of the body to which the harness is applied, and, if neglected, extends to other parts of the body. Pimples and scabs appear at the seat of the disease, and the hair gets rubbed off; in neglected cases the skin becomes hard and folded and the animals emaciate.

Names, Addresses, and Districts of the Council's Veterinary Inspectors.

Mr. W. Hunting, Chief Inspector, 5 Halkin Place, Belgrave Square, S.W. *Telephone*—Kensington, 2782.
District.—The City of Westminster, the Royal Borough of Kensington, and the Metropolitan Boroughs of Paddington, Chelsea, Hammersmith, Fulham, Wandsworth, and Battersea.

Mr. C. J. Humphrey, Inspector, 23 Beechfield Road, Catford Hill, S.E. *Telephone*—Sydenham, 1352.
District.—The Metropolitan Boroughs of Lambeth, Southwark, Camberwell, Bermondsey, Deptford, Lewisham, Greenwich, and Woolwich.

Mr. W. F. Shaw, Inspector, 445 Liverpool Road, Highbury, N. *Telephone*—North, 2489.
District.—The Metropolitan Boroughs of Hampstead, St. Marylebone, St. Pancras, Holborn, Finsbury, Islington, Stoke Newington, Shoreditch, Stepney, Bethnal Green, Hackney, and Poplar.

Any communication on this matter (other than notification to the veterinary inspector of outbreaks of disease) should be addressed to the Chief Officer of the Public Control Department, London County Council, 31 Spring Gardens, S.W.

G. L. Gomme, Clerk of London County Council.
County Hall, Spring Gardens, S.W.
June, 1909.

The Saracen's Head Hotel, Snow Hill, has just been closed. The Proprietors issued a statement expressing their regret that owing to increased taxation they had decided to close the hotel as licensed premises. The hotel is stated to be over three hundred years old, and was introduced by Dickens in "Nicholas Nickleby." In the days of mail coaches, the hotel was one of the recognised stopping-places.

NATIONAL VETERINARY ASSOCIATION.

The Annual Dinner.

The Annual Dinner of the Association was held in the George Hotel, Harrogate, on Wednesday, nearly 100 members and guests, including ladies, were present, under the presidency of Mr. G. E. Bowman.

After the loyal toasts, "The Imperial Forces" was proposed by Prof. Macqueen, who in an exceedingly humorous speech, for the first time brought into the toast the "Boy Scouts," to whom in the future, he suggested, the country might owe its very existence. Of the Army Veterinary Service he spoke very highly, observing that under the present Director-General, who had been a distinguished member of the Association, the Service had become highly efficient and greatly valued. Of the older members of the Service he mentioned Col. Steel as one whom the profession delighted to honour, the worthy father of a distinguished son (Cheers).

Col. Steel responded, also paying a tribute to Major-Gen. Smith who, following out the steady progress of his predecessor, had brought the Service to its present perfection.

Dr. McCall also responded, expressing the opinion that the Service was now in a better position than it had ever been in.

Mr. A. W. Mason, in proposing the health of the Visitors, referred to the welcome presence of Dr. Williams, of Canada.

Mr. E. E. Lawson and Mr. J. Stephenson replied. Mr. Lawson, in the course of his remarks, thought that, having regard to the fact that animals sold for exportation were sold subject to an examination for tuberculosis, it was time the Agricultural Societies of the Kingdom made it a *sine qua non* that animals taking prizes at their shows should do so on the condition of passing the tuberculin test, and asked the Association to do its best to bring this about. His remarks were endorsed by Mr. Stephenson.

Dr. Williams also replied. In the States, he said, the profession was still youthful, but it was working steadily for the advancement of the veterinary profession, and it was hoped that very soon it would take its place with the British profession in forming one compact body of English-speaking veterinarians, all labouring for one common end—the welfare of a great profession (Cheers).

Mr. W. Hunting, in a happy speech, proposed the toast of "The Mayor and Corporation of Harrogate." He complimented the town upon its sanitary condition, and suggested as an epitaph for the Mayor and Corporation the words on the tomb of Christopher Wren: "If you seek a monument, look around."

Councillor Lofthouse (the Deputy Mayor) and Alderman Milner responded.

Dr. Neville Williams, in proposing the toast of "The National Veterinary Association, said the veterinary profession, like the medical profession, had made immense strides during the past ten years, both on its ethical and scientific side. Patients, both human and animal, received much more consideration than in the past, though in either case he thought not sufficient was left to nature. The Association had been established for many years, but was not quite in so happy a position as the medical profession. Unity was strength, and the provincial Associations should be impressed with the value of becoming affiliated. Everything that could be done to consolidate the profession should be done, and the Veterinary Association should be in much closer association with the British Medical Association than at present; he was sure the British Medical Association would welcome such co-operation. Both had the same object, the lessening of suffering. Valuable as the work of the Association was in its professional, scientific, and

ethical aspects its social work was still greater, for nothing tended to remove professional jealousy and suspicion amongst practitioners of the same profession as constantly meeting each other at gatherings. He spoke highly of the work of Mr. Bowman as President and Mr. Hunting as Secretary, for on the energy and ability of those officers he thought the welfare of the Association, as of all associations, depended. (Cheers).

The PRESIDENT in reply, said the National Association was the greatest association connected with the veterinary profession, and he had been proud to be President of the year. The meetings were most interesting and valuable for meeting old friends, telling grievances. He had spared no pains to make the present gathering a success, (Hear, hear,) and he believed no President had ever had a better second in command than Mr. Clarkson. He also spoke warmly of the work of the Members of the Local Committee.

The toast of the ladies was proposed in a very humourous speech by Mr. TREVOR SPENCER, and was responded to by Mr. Howard in a racy speech, adequate to the subject, and much appreciated. There was a capital selection of songs, recitations and duets, given between the speeches, and the very pleasant meeting broke up about midnight.

THE YORKSHIRE SOCIETY'S EXCURSION.

On the Friday following the meeting the members of the National were invited to an excursion to Bolton Abbey, Bardon Towers, and up to the moors at Burnsall, a distance of 20 miles. The conveyance was by motor *chars-à-banc*, and there were whispers as to the "eternal fitness" of such a party in that class of vehicle, but the result demonstrated that our hosts were right. No cattle could have done the work in anything like the time—and there were hills; in some of the upper parts the road was like a switchback railway. The route was up the picturesque dale of the Wharfe, the road running sometimes beside the river, sometimes 50 feet above it, through Otley and Ilkley to the Devonshire Arms, where a capital luncheon was served, and after the toast of the President of the Yorkshire V.M.S., the party adjourned to the lawn which was flanked by a hedge of rhododendron in full bloom, and gave a beautiful view of the woods about Bolton Abbey, with the fells in the background, and photographs of several groups were taken. Then to the cars again, and one party went on up to Burnsall and the higher fells, others to the ruins of Bolton Abbey, or to "The Strid" and by the path through the rock-strewn, woody dale with its wealth of ferns, beside the Wharfe: and so back to tea. The return journey was by Kex Gill Moor and Forest Moor, and its characteristic features lost little, if anything, from the driving clouds of mist which shrouded it in places. But whatever opinions may be held as to the weather (none seemed to express them), there could be no two opinions as to the thorough way in which the Yorkshiremen had laid themselves out to provide comfort and enjoyment for their visitors.

Breaking in a Jibber. — Cruelty Case at Chichester.—Dismissed.

An extraordinary allegation of cruelty to a horse was heard by the Chichester County Magistrates on Saturday, July 3rd, when Lawrence Adames, a farmer, of Strettington, was summoned by Inspector A. C. Batten, R.S.P.C.A., for ill-treating a horse at Boxgrove, and William White, a caretaker, of Strettington, was charged with aiding and abetting Adames to ill-treat the same animal.

Mr. W. P. Cogan appeared in support of the prosecution, and Mr. J. A. Morris Bew represented defendants, who pleaded not guilty.

The prosecution alleged that Adames was seen beating the horse with a riding crop, while White held the animal with a lunging rein. After this had been going on for some time, straw was placed under the horse and lighted in order to make the horse go. As soon as the straw was set alight the animal jumped away.

Herbert Budd, employed by Mr. A. Fogden, of Strettington, who said he saw what happened 130 yards away, and James Matthews, employed by Mr. F. Chitty, of Chichester, gave evidence; and Inspector Batten spoke to interviewing the defendants.

For the defence, it was contended that the horse was a valuable one and had never been properly broken in. It had given some trouble, though at times it could be driven. On this particular day Adames said he was going to take the horse out, and he had just harnessed it when it jibbed and knocked him down. Miss Killick (his partner) ran across to White, who came and assisted Adames to get free. The animal continued to jib, so he put on the lunging rein to make it warm, and whenever it jibbed he gave it a stripe with a riding crop. Then the horse kicked, threw itself down, and would not move. They therefore got some straw, put it two yards behind the horse, and lighted it, because it was well known that a horse would run away on seeing smoke. It was merely done to frighten the animal, and all that was done was in accordance with the usual custom of breaking in horses.

The defendant White corroborated this story, and Mr. G. M. Thomas, M.R.C.V.S., and Mr. Angwin, M.R.C.V.S. (Arundel), gave evidence to say that when they saw the horse soon afterwards there was no sign of ill-treatment.

After a long hearing, the Bench decided to dismiss the case, the Chairman remarking that there seemed to have been a good deal of exaggeration on the part of the prosecution.—*Sussex Daily News.*

Devon Farmers and the New Bill.

A meeting of the Council of the South Devon Flock-book Association was held at Chubb's Hotel, Plymouth, on the 1st inst., Mr. E. H. Hosking presiding. The Secretary (Mr. W. W. Chapman) remarked, with regard to the Veterinary Surgeon's Amendment Act, that clause 4, to which they had taken exception, had been withdrawn. But he had heard from persons closely connected with the management of certain societies which were opposing the Bill, that by the withdrawal of clause 4 they did not quite accomplish their object, for it was thought that those interested had quite as stringent powers under the existing Act as would have been granted by clause 4. Mr. Mansell was bringing before the National Sheep Breeders' Association, at their meeting in November next, a resolution asking for an amendment to be inserted in the Amendment Bill limiting the powers of veterinary surgeons, similar to those possessed by doctors under the Medical Act of 1853. The suggestions in that resolution would have the effect of allowing present practitioners to perform minor operations as at present. It was decided to support the action of Mr. Mansell.

Personal.

Mr. HENRY C. WILKIE'S anatomical diagrams, together with one, the copyright of which is now held by Messrs. Cooper, of Berkhampstead, were exhibited at the Franco-British Exhibition, and Mr. Wilkie was awarded the silver medal. This should be a matter of some interest to those engaged in veterinary teaching.

Mr. R. E. MONTGOMERY, M.R.C.V.S., formerly Professor at Liverpool University, has been appointed Veterinary Bacteriologist of the East African Protectorate.

Obituary

BLAKEWAY.—On 11th inst, at Chaddesley Corbett, Amy, wife of John Blakeway, F.R.C.V.S. Aged 42 years.

ARMY VETERINARY SERVICE.

FORMATION OF A SPECIAL RESERVE OF THE ARMY VETERINARY CORPS.

1. It has been decided to enlist a limited number of special reservists for the Army Veterinary Corps for service as privates only.

These men will be enlisted under Part III of the Territorial and Reserve Forces Act, 1907.

2. They will not be organised in units, but will be available for service at home or abroad with the Army Veterinary Corps on mobilisation.

They will undergo a course of training as soldiers, and receive instruction in technical methods which cannot be acquired in civil life.

ENLISTMENT.

3. Men will be enlisted for six years. The age on enlistment will be from 18 to 30 years. Preference will be given to men who have had experience with horses.

4. The standard of height will be 5ft. 3in. and upwards.

The comparative table for 18 years of age and upwards laid down in "Test A," Appendix II., Recruiting Regulations, 1907, will be applicable, except that the chest girth, when fully expanded, will be ½in. lower than that laid down in the test.

5. The period of re-engagement will be for 4 years. The limit of age for continuance in the service will be 40 years.

6. Men enlisted will not be allowed to enlist into the Regular Army, nor will they be permitted to transfer to any other branch of the Special Reserve.

7. Recruits will be enlisted on Army Form B 59, which will be prepared in duplicate, and an additional paragraph will be inserted both on the Notice Paper and on the attestation to the effect that recruits will not be allowed to join the Regular Army from the Special Reserve.

8. Every recruit must sign a certificate on Army Form B 151, acknowledging that he will not be entitled to corps pay until reported qualified in corps duties.

Recruiting officers will satisfy themselves that recruits can write, and read not only printed matter but plain handwriting, and that they understand what they read. Special care will be taken that only men of good education and intelligence are enlisted.

RECRUITING.

9. The schedule at the end of this order shows the recruiting areas in which recruiting will be opened and the stations to which men will be sent for training on enlistment.

REWARDS TO RECRUITERS.

10. The rewards payable to recruiters or recruiting agents will be at the same rates and given under the same conditions as are in force for the Special Reserve.

TRAINING.

11. A syllabus of training will be issued. Recruits will be trained for 6 months on enlistment. The annual training will be for a period not exceeding 15 days, and will be carried out according to circumstances either at veterinary hospitals or with Territorial Force units.

PAY, ALLOWANCES, AND BOUNTIES.

12. A special reservist of the Army Veterinary Corps will draw pay and corps pay, subject to the qualification referred to in paragraph 8, at army rates during training on enlistment, annual training, and when called out for service. He will also receive the usual issue of rations, &c., in kind, or the customary allowance in lieu thereof.

13. The rates of pay, corps pay and allowances, will be as follows :—

The pay will be 1s. 2d. a-day.

Corps pay, not exceeding 6d. a-day, will be granted in addition, to men qualified for corps duties.

No good-conduct or proficiency pay will be issuable.

Messing allowance of 3d. a day will be given so long as the field service ration of groceries and extras is not issued.

Kit allowance will not be granted.

14. Bounties will be issued in lieu of any form of reserve pay as follows :—

	£	s.	d.
Bounty on completion of recruit's training	1	10	0
Training bounty	1	0	0
Three non-training bounties of £1 each payable on the 1st of October, 1st of December, and 1st of February in each year to men who have completed recruit's training	3	0	0

15. The payment for purchase of discharge will be £3.

DUTIES OF THE RECORD OFFICER.

16. The officer i/c records, Army Veterinary Corps, at the War Office, will be the commanding officer of these reservists, and will be responsible for maintaining the strength of the reserve, calling up reservists, and keeping up their addresses, documents, Army Book 359, etc.

He will arrange with which units and at which stations the special reservists are to perform their annual training.

SCHEDULE.

Recruiting areas in which recruits will be enlisted.	Stations to which recruits will be sent.
2nd, 31st, 37th, 39th	Aldershot.
13th, 28th, 29th, 62nd	Bulford.
102nd, Dublin	Curragh.
3rd, 35th, 50th, Woolwich	Woolwich.

ESTABLISHMENT.

The establishment of these reservists for the year 1909-10 will be 50 privates.

CORRESPONDENCE.

INFLUENZA—AN ENQUIRY.

Sir,

Would you be so kind as to let me know whether there is any drug or combination of drugs which can be used as a preventative of influenza, or which if given before the appearance of symptoms would be likely to lessen the consequences of the disease.—Yours faithfully,

F. B. GREER.

Newcastle-on-Tyne. July 7.

[We know of none—wish we did.—ED.]

THE LONDON PARASITIC MANGE ORDER, 1909.

Sir,

The enclosed copy (see p. 65) was left at one of my forges. The London County Council has made this Order out on June 1st, and this notice has but just appeared, and then only through an indirect way. I think the profession ought to have notice of it.—Yours truly,

ARTHUR JACOBS, M.R.C.V.S.

2 Upper Park Place, London, W.
July 13.

WEST AUSTRALIA FOR VETERINARY SURGEONS.

Sir,

Re the letter signed "One of the Three" in your issue of 24th April. Having spent over two years in West Australia, and visited all the Australian States with ample opportunities for observation, my opinion may be of value on the subject under review.

I agree with "One of the Three" in the main as regards West Australia, and indeed might add all the Australian States, [with a small exception in favour of this State—Victoria. This is the only State where there is a law to regulate veterinary practice, and that to a considerable extent is but a dead letter, so that what with the number already on our local register, the annual increase by the graduates of the Melbourne Veterinary College, the additions from the European Veterinary Colleges, and the ever present colonial quacks there does not appear to be much inducement for others to come.—Yours faithfully,

M. Bodey, R.V.S.M.

Ballarat, Victoria. May 31.

VETERINARY SURGEONS AND THE MOTOR TAXES.

Sir,

Does not the enclosed cutting from last Saturday's *Daily Chronicle* emphasise our contention that a deputation from our Council should wait on the Chancellor *at once*? He allowed the doctors the rebate on the motor tax from the first, while now they ask for and get the rebate on the petrol duty. We get nothing; nor shall we unless we bestir ourselves. The Chancellor, if he seriously considers the matter at all, will most naturally think that anything not asked for officially, is not required by the profession at large.—Yours truly,

R. Glave Saunders, M.R.C.V.S.

Penzance, July 7.

"Petrol Rebate for Doctors.

The Chancellor of the Exchequer has informed a deputation of the Medical Committee and the Motor Union of the British Medical Council that he recognised the justice of the request to place medical men in the same position as the owners of commercial motor cars in regard to the rebate on petrol. The difficulty was as to the practicability of carrying it out, but they might rest assured he would see that the doctors enjoyed this privilege.

This means that doctors will pay only 1½d. instead of 3d. on petrol. The Finance Bill already provides for only half the charges for car licenses."

Sir,

I wrote our Member of Parliament, Lord Edmund Talbot, *re* the taxation of motor cars and petrol, imposed by the present Government, especially as regards the rebate to doctors and ignoring the claims of the veterinary profession.

I enclose copies of two letters I have received on the subject, one from Lord Talbot and another from W. Joynson Hicks, Esq.—Yours truly,

Jas. T. Angwin, M.R.C.V.S.

Arundel, Sussex. July 11.

"House of Commons.
May 11, 1909.

Dear Mr. Angwin,—I am taking care that the point raised in your letter is being dealt with by the special Sub-Committee we have appointed to go into this portion of the Government Budget proposals.

You may have observed we yesterday got the Chancellor of the Exchequer to undertake to receive a deputation of veterinary surgeons.

I think it is absurd not to extend to your profession the same rebate allowed to the doctors. I further think a rebate on the petrol ought to be allowed to both.—Yours faithfully,

Edmund Talbot."

"26A Bryanston Sq., W.
July 9.

Dear Sir,—Lord Edmund Talbot has handed to me your letter of the 9th May, as I am somewhat specially interested in the motor taxation question.

The question of rebates to veterinary surgeons has already been raised in the House; the Chancellor of the Exchequer has consented to receive a deputation on the subject if a representative one approached him. The only proper course would, I think, be for your College to approach him.

If there is anything I can do to assist I shall be pleased.—Yours very truly,

W. Joynson Hicks.

J. T. Angwin, Esq.

UNQUALIFIED PRACTITIONERS AND THE NEW BILL.

Sir,

Although, I hear a thousand voices echoing "You are wrong," I am afraid that by legislation we shall never entirely stamp out the unqualified practitioners; rather let us give the discussion best and do what we can to keep it in check, ever ready to stop frauds and quackery on the public. Take my instance! There are four unqualified men opposing me. One, Mr. David Eric Wilkinson, of Wanstead, who, through no fault of his own, did not finish his curriculum, is my strongest opponent. Personally, I admire the man. In saying he is a gentleman one does not defile the King's English, nor does he tell his clients that he is qualified when he is not. He has been condemned, hanged, and quartered by one Council, and for what? Would to goodness we had more men of his class in the profession.

Take another instance! The late Mr. Chas. Skelton's brother. Is there any court of law which will compel these men to become chargeable to the parish? From what I gather in my district the public want, and what we shall have to supply like the medical profession, is some form of first aid, practical men, clever men of the village, or call them what you like, after they have gone through a course of teaching.

The days are gone, in spite of what has been said lately, when the veterinary surgeon smells so abominably of vile oils as not to be allowed in the kitchen. Let us aim directly at diseases by bacteriology and educate our clients to pay us to keep their animals in health rather than treat them when diseased. We claim to be a scientific profession. Let us see that we become so. The young men entering the College now are not fit for the vile work which our forefathers undertook, nor is it likely that they will ever season or acclimatise to it. If this is wanted we must educate men to undertake it.

Apologising for troubling you, but really we are becoming too conservative. Ever let us remember that our right to exist depends upon our usefulness to the community at large, and consider their requirements as much as our own, not forgetting the words of the Great Book "Thou shalt love thy neighbour as thyself."—Yours faithfully,

Geo. Upton.

Evolution of British Cattle.—The Fashioning of Breeds. 8v., Cloth, 148 pp. 7/6 net. Vinton & Co.

Communications and Papers Received.—Mr. H. C. Wilkie, Annual Report of Public Health Department, City of Edinburgh, 1908, A. M. Williamson, M.D., B.Sc.

Special report on Maladie du Coit: Health of Animals branch, Dept. of Agric., Ottawa. R. Rutherford. Board of Agriculture Leaflet, Nos. 46, 202.

Lancaster Observer, *Lloyd's News*, *Sussex Daily News*, *The Star*.